



DEPARTMENT OF THE TREASURY  
WASHINGTON, D.C.

May 9, 2017

Board of Trustees, Automotive Industries Pension Plan  
ATPA  
1640 South Loop Road  
Alameda, CA 94502

Dear Mr. Schumacher, Ms. Hancock, and the Board of Trustees:

On September 27, 2016, you submitted an application to the Secretary of the Treasury (Secretary or Treasury) on behalf of the Board of Trustees of the Automotive Industries Pension Fund (Fund). The application you submitted (Application) requests approval to reduce benefits under the Multiemployer Pension Reform Act of 2014 (MPRA).

Treasury has reviewed the Application under the terms of MPRA, its implementing regulations, and other applicable law. Treasury also has reviewed the comments received on the Application from organizations and individuals.

**I am writing to notify you of Treasury's decision to deny the Application because the proposed suspension fails to satisfy the statutory criteria for approval.**

Under the MPRA, Treasury, in consultation with the Pension Benefit Guaranty Corporation (PBGC) and the Secretary of Labor (DOL), must approve an application upon finding that the plan is eligible for the benefit suspensions and has satisfied the applicable statutory requirements.<sup>1</sup> After reviewing the Application and consulting with PBGC and DOL, Treasury has determined that the suspension described in the Application fails to satisfy the requirement set forth in MPRA “that the proposed benefit suspensions, in the aggregate, be reasonably estimated to achieve, but not materially exceed, the level that is necessary to avoid insolvency.”<sup>2</sup> Specifically, Treasury has determined that the mortality rate assumption, the assumption regarding the rate at which married participants will elect a joint and survivor benefit, and the assumption regarding the probability of benefit commencement of terminated vested participants are not reasonable under the standards in the regulations.

Treasury’s key findings are described below.

---

<sup>1</sup> Code § 432(e)(9)(G)(i).

<sup>2</sup> Code § 432(e)(9)(D)(iv).

## FINDINGS

MPRA requires the Secretary of the Treasury to approve, in consultation with PBGC and DOL, an application for a suspension of benefits “upon finding that the plan is eligible for the suspensions and has satisfied the criteria of subparagraphs (C), (D), (E), and (F)” of section 432(e)(9) of the Internal Revenue Code (Code), as amended by MPRA.<sup>3</sup>

As further described below, the Application fails to satisfy the criteria of subparagraph (D) because it does not comply with the limitation of clause (iv) of subparagraph (D), which requires that “[a]ny suspension of benefits under a plan, in the aggregate... shall be reasonably estimated to achieve, but not materially exceed, the level that is necessary to avoid insolvency.”<sup>4</sup>

### *Requirement that Suspension Be Reasonably Estimated to Avoid Insolvency*

The regulations implementing Code § 432(e)(9) require that an applicant use actuarial projections to demonstrate that a suspension, in the aggregate, is reasonably estimated to achieve, but not materially exceed, the level that is necessary to avoid insolvency.<sup>5</sup>

One of the required actuarial projections is a deterministic projection<sup>6</sup> of cash flows throughout an extended period under which the plan’s asset balance is projected forward using assumptions regarding the amounts of money coming into the plan (for example, contributions, withdrawal liability payments, and investment returns) and the amounts going out of the plan (for example, benefit payments and administrative expenses). The extended period over which the applicant must demonstrate that it satisfies the requirement to avoid insolvency is at least 30 years, but may be longer under certain circumstances.<sup>7</sup> A plan’s deterministic projection of cash flows satisfies the requirements of the regulations if the projection shows that both the plan’s available resources<sup>8</sup> and solvency ratio<sup>9</sup> do not decline during the last five years of the extended period. Plans with more than 10,000 participants, such as the Fund, are also required to provide stochastic projections that must reflect variances in the investment return assumption. To satisfy the requirements of the regulations, the stochastic projections must demonstrate that the probability the plan will avoid insolvency throughout the extended period is greater than 50 percent.<sup>10</sup>

---

<sup>3</sup> Code § 432(e)(9)(G)(i).

<sup>4</sup> Code § 432(e)(9)(D)(iv).

<sup>5</sup> 26 C.F.R. § 1.432(e)(9)-1(d)(5).

<sup>6</sup> A deterministic actuarial projection is a projection based on inputs that are assumed to occur with complete certainty. These projections are in contrast to stochastic actuarial projections, which estimate the probability of different outcomes as a result of random variation in one or more inputs (in particular, the investment return) over time.

<sup>7</sup> 26 C.F.R. § 1.432(e)(9)-1(d)(5)(ii)(C).

<sup>8</sup> A plan’s available resources (i.e., the amount available to pay benefits in the current year) are defined under Code § 418E(b)(3) as the plan’s cash, marketable assets, contributions, withdrawal liability payments, and earnings, less reasonable administrative expenses and amounts owed for such plan year to PBGC under section 4261(b)(2) of the Employee Retirement Income Security Act of 1974 (ERISA).

<sup>9</sup> A plan’s solvency ratio is defined at 26 C.F.R. § 1.432(e)(9)-1(d)(5)(ii)(B) as the ratio of the plan’s available resources (as defined in Code § 418E(b)(3)) for the plan year to the scheduled benefit payments under the plan for the plan year.

<sup>10</sup> 26 C.F.R. § 1.432(e)(9)-1(d)(5)(ii)(A)(2).

In this case, the Fund's deterministic projection uses an extended period continuing through the plan year ending on December 31, 2062.<sup>11</sup> The Fund's stochastic projection shows that the probability that the Fund will avoid insolvency throughout the extended period is 50.3 percent.<sup>12</sup>

In order to demonstrate that the proposed suspension does not materially exceed the level that is necessary to avoid insolvency, the regulations require that an application include projections showing that a smaller suspension (the specification for which is set forth in the regulations) would result in insolvency.<sup>13</sup> In this case, the Fund's deterministic projection shows that, with a 5 percent smaller suspension, the Fund would become insolvent in 2051.<sup>14</sup>

### *Standards for Selecting Actuarial Assumptions*

The regulations require that each of the actuarial assumptions and methods used for the required projections, as well as the combination of actuarial assumptions and methods, be reasonable, taking into account the experience of the plan and reasonable expectations.<sup>15</sup> In evaluating whether the assumptions and methods used in the application are reasonable, Treasury referred to guidance provided by professional standards that apply to the actuarial profession, which are primarily the Actuarial Standards of Practice (ASOPs).<sup>16</sup>

The ASOPs require that when selecting actuarial assumptions, historical and current demographic and economic data relevant as of the measurement date be taken into account and that the assumptions have no significant bias. The ASOPs and regulations also require that each of the assumptions or methods used be appropriate for the purpose of the measurement. Further, the ASOPs provide that the actuary must consider the materiality of the assumptions and the balance between the benefits of using more refined actuarial assumptions (that is, assumptions that are based upon more extensive and specific study and research) and the cost of using those refinements.

The cash flow projections, which are the measurements required by MPRA, are by their nature highly sensitive and require more refined actuarial assumptions. These projections generally are much more sensitive to changes in actuarial assumptions than the liability measures that actuaries make for pension plan purposes (such as the determination of the minimum amount that must be contributed annually to the fund). Even slight variances in the assumptions that are used as part of the cash flow projections can produce materially different results and can have an impact on cash flow at any given point during the extended period for projecting insolvency.

The need for more refinement in the selection of actuarial assumptions for these cash flow projections is especially important considering the permanent impact of a proposed benefit suspension on participants and beneficiaries. These cash flow projections are made on a one-

---

<sup>11</sup> Application at 7.1.15.

<sup>12</sup> Application at 7.1.20.

<sup>13</sup> 26 C.F.R. § 1.432(e)(9)-1(d)(5)(iii).

<sup>14</sup> Application at 7.1.20.

<sup>15</sup> 26 C.F.R. § 1.432(e)(9)-1(d)(5)(iv)(B).

<sup>16</sup> In this case, the relevant ASOPs are numbers 4, 35, and 41.

time basis for purposes of a benefit suspension application, and they are not required to be updated to adjust for actual experience during the extended period. Once benefit payments are reduced or cut, the amounts are not returned. The amount of the suspension cannot easily be (and generally will not automatically be) increased or decreased in a later year if the plan's actual experience proves to be different than projected.<sup>17</sup> Therefore, an applicant selecting actuarial assumptions for purposes of the cash flow projections must take into account that these projections require more refined actuarial assumptions.

In addition, refinement in the selection of actuarial assumptions is important in demonstrating that the actual suspension design fits within the narrow corridor required by the statute that the suspension be at a level that is reasonably estimated to avoid insolvency, while not materially exceeding the level that is necessary to achieve that goal. The use of actuarial assumptions that are either too optimistic or pessimistic undermines this statutory requirement.

### *Selection of Actuarial Assumptions in this Application*

Treasury has concluded that several of the key actuarial assumptions used for the cash flow projections in the Application are not reasonable. Specifically, the mortality rate assumption, the assumption regarding the rate at which married participants will elect a joint and survivor benefit, and the assumption regarding the probability of benefit commencement of terminated vested participants are not reasonable under the standards in the regulations. Because the Application uses projections that rely on assumptions that are not reasonable, it fails to demonstrate that the proposed suspension is reasonably estimated to achieve, but not materially exceed, the level that is necessary to avoid insolvency. Accordingly, the proposed suspension does not meet the statutory requirements for approval because it does not satisfy the limitations set forth in Code § 432(e)(9)(D).<sup>18</sup>

### *The Mortality Rate Assumption Is Not Reasonable*

Benefit payments under the Fund generally continue for a participant's lifetime or for the combined period of the participant's lifetime and the lifetime of the participant's beneficiary. The longer participants and beneficiaries live, the more the Fund must pay in benefits. For purposes of the cash flow projections, mortality assumptions are used to estimate how long participants and beneficiaries will live, which, in turn, is used to determine the total amount of benefits that will be paid.

---

<sup>17</sup> A suspension may be of indefinite duration, provided that the plan sponsor (the Board of Trustees) makes an annual, written determination that the plan sponsor continues to take all reasonable measures to avoid insolvency and that the plan would not be projected to avoid insolvency if no suspension of benefits were applied under the plan. 26 C.F.R. § 1.432(e)(9)-1(c)(4)(i).

<sup>18</sup> Following discussions with the Fund regarding the reasonableness of various assumptions used in the Application, the Fund provided significantly revised projections, based on different assumptions and methods, to Treasury in support of its position that the proposed suspension is reasonably estimated to achieve, but not materially exceed, the level that is necessary to avoid insolvency. Because these significantly revised projections were based on changed assumptions and were not subject to public notice and comment pursuant to section Code § 432(e)(9)(G)(ii), Treasury cannot rely on these projections in evaluating the current Application. See *Air Transport Ass'n of America v. FAA*, 169 F.3d 1 (D.C. Cir. 1999).

Mortality assumptions typically include both an assumption regarding the current mortality rate, which is reflected in “base” mortality tables, and an assumption about expected long-term improvements in longevity, which is reflected in a mortality improvement scale. Standard mortality tables are developed using relevant historical and demographic data for standard populations.<sup>19</sup> For purposes of measurements that require more refined assumptions, using a mortality table that deviates from standard tables must generally be supported by actuarially credible evidence demonstrating how the mortality experience for the plan is expected to differ from the mortality experience for the standard population used to develop the standard tables.

In this case, the Application uses an adjusted version of a standard base mortality table for current mortality rates, but the Fund has not provided support for the adjustment. The mortality assumptions used in the Application are an adjusted version of a current standard table for mortality, the RP-2014 Blue Collar Healthy Annuitant Mortality Table (RP-2014 Blue Collar Healthy Annuitant Table).<sup>20</sup> The adjustment applies a one year “set forward,” meaning that the mortality rates of participants are assumed to be those of a person one year older than the participant’s actual age. This set forward adjusts the mortality assumption so that participants are assumed to die sooner, and thus receive fewer benefit payments, generating less cash outflow than would otherwise be expected using the unadjusted standard mortality table.

Although adjustments to a standard mortality table may be appropriate if they are supported by actuarially credible plan evidence, the Fund has failed to provide relevant historical or demographic data to justify its adjustments. The Fund was asked to provide, for each of the last three to five completed plan years, its actual experience for mortality as evidence supporting its adjustment to the RP-2014 Blue Collar Healthy Annuitant Table. The evidence provided by the Fund shows that, instead of plan participants dying earlier than would be expected under the standard table, plan participants are actually dying later than would be expected under the standard table. Specifically, the data (rates of mortality for ages 50-100, assigning a weight to each participant equal to the amount of his or her benefit) show that the amount-weighted number of deaths occurring during this period was approximately 90 percent of the corresponding number of deaths that would be expected using the unadjusted RP-2014 Blue Collar Healthy Annuitant Table.

Because the mortality rate assumption used in the Application was not consistent with historical and demographic experience relevant as of the measurement, Treasury has concluded that this assumption is not reasonable. Therefore, the proposed suspension does not satisfy the statutory requirement that it be reasonably estimated to avoid insolvency.

---

<sup>19</sup> The Society of Actuaries (SOA) issued a series of mortality tables in 2014 reflecting the mortality experience for the population of participants covered under private retirement plans in the United States. The SOA is a professional organization in the United States engaged in actuarial research and education that issues mortality tables and mortality improvement scales for private pension plans. Treasury has historically relied on these mortality tables and mortality improvement scales for pension plan funding and other purposes.

<sup>20</sup> The RP-2014 Blue Collar Healthy Annuitant Table includes an adjustment to the standard mortality tables to reflect the fact that plans with primarily union participants experience higher mortality rates than plans with primarily non-union participants.

### *The Assumption Regarding Spousal Survivor Benefits Is Not Reasonable*

Under the terms of the Fund's plan document and applicable law, benefits to unmarried participants are paid in the form of a single-life annuity, and the default form of benefit for married participants is a joint and survivor annuity (although married participants may elect, with spousal consent, a single-life annuity instead of a joint and survivor benefit).<sup>21</sup> Because payments continue to a surviving spouse under a joint and survivor annuity, benefits are expected to be paid over a longer period than a single-life annuity. To account for this longer period during which the benefits are expected to be paid, a joint and survivor annuity is usually reduced, so that it is the actuarial equivalent of a single-life annuity.<sup>22</sup>

The forms of benefit elected by participants affect the timing of amounts of money going out of the plan and are used in determining how soon, if ever, a plan will become insolvent. In particular, an assumption that retirees choose joint and survivor annuities rather than single-life annuities means that cash flow projections will reflect lower benefit payments in the early years of the projection period and higher benefit payments in later years. As such, the assumption regarding the election of spousal survivor benefits is material in cash flow projections relating to plan solvency, and the assumption requires appropriate refinement.<sup>23</sup>

In its Application, the Fund assumed that 100 percent of married participants would elect (or "take-up") the 75 percent joint and survivor annuity available under the Fund.<sup>24</sup> However, the Application provided no support for this assumption, and, when asked to provide data supporting this assumption, the Fund indicated that only 42 percent of married participants elected joint and survivor annuities during the five-year period preceding submission of the Application.<sup>25</sup> In the same communication, the Fund acknowledged that the take-up rate in the Application needed to be revised, but it suggested that a rate higher than 42 percent was more likely in the future.<sup>26</sup> Although there is some basis for the Fund's assertion that changes in behavior can be expected in the future and that the take-up rate of joint and survivor annuities may increase somewhat in the

---

<sup>21</sup> Application at 36.1.34-37.

<sup>22</sup> A plan can be designed to "subsidize" the joint and survivor benefit (making it more valuable than the single-life annuity in order to encourage participants to elect it). In this case, the Fund eliminated its subsidized joint and survivor annuity for future retirements effective July 1, 2008, as part of its Rehabilitation Plan. See Application at 13.1.

<sup>23</sup> ASOP 35, section 3.5.5, page 9.

<sup>24</sup> Application at 7.2.58. The Fund assumed that 85 percent of those participants who have not commenced their benefits are married.

<sup>25</sup> This data was provided to Treasury by the Fund's actuary via e-mail on March 7, 2017.

<sup>26</sup> Under PBGC rules for determining the benefit amount that it guarantees after plan insolvency, the PBGC guarantees the same monthly amount for a participant regardless of the form of benefit. As a result, some joint and survivor annuity benefits may effectively become more valuable relative to the single-life annuity if the plan becomes insolvent. This is because the value a participant loses as a result of insolvency may be smaller if the participant elected the joint and survivor payments (which are already lower than a single-life annuity to begin with) than if the participant elected a single-life annuity. Under MPRA, benefits cannot be reduced below 110 percent of the PBGC guarantee. Thus, after a MPRA benefit suspension, participants with benefits that are close to the amount protected by the PBGC guarantee limitation would receive greater value (due to the PBGC guarantee limitation) by taking a joint and survivor annuity. As a result, participants could be more likely to take a distribution in that form, which would increase the rate at which married participants elect joint and survivor annuities.

future, the Fund failed to provide any support to justify its assumption that all married participants would elect a joint and survivor benefit.

Because the Fund's assumption that 100 percent of married participants will elect a joint and survivor option was not consistent with historical and demographic experience relevant as of the measurement, Treasury has concluded that this assumption is not reasonable. Therefore, the proposed suspension does not satisfy the statutory requirement that it be reasonably estimated to avoid insolvency.

*The Assumption Regarding Probability of Benefit Commencement for Terminated Vested Participants Is Not Reasonable*

Participants who have vested in their benefits under the Fund, but who have not yet begun receiving their benefits, are known as "terminated vested" or "inactive vested" participants. One of the actuarial assumptions that is used to determine cash flow projections is an assumption regarding the probability of benefit commencement, by age, for participants who have terminated with deferred benefits or who are assumed to terminate with deferred benefits in the future. The rate at which these deferred vested participants are assumed to commence benefits can have a material effect on the Fund's cash flow projections, and this assumption must be appropriately refined.

As noted above, according to the Application, there are currently 10,394 terminated vested participants who have not yet commenced benefits under the Fund. The Application indicates that its cash flow projections are based on an assumption that terminated vested participants will retire and commence benefits at age 65, but that terminated vested participants over age 70 who have not yet commenced benefits will never commence benefits under the Fund.<sup>27</sup>

According to the Fund, terminated vested participants over the age of 70 who have not commenced benefits were excluded from the valuation (and thus from the cash flow projections) because they are either deceased, out of the country, or unaware of the benefit. The Fund indicated that the Fund's administrative staff routinely looks for "missing" participants, and that it "seemed" reasonable to exclude from the projections participants who failed to commence their pension within five years after normal retirement age.

These assertions, however, are not consistent with the Fund's experience. Information for the most recent five years provided by the Fund indicates that terminated vested participants older than age 70 do, in fact, commence benefits at varying rates at and after age 70. Specifically, the data indicate that there are currently nearly 500 terminated vested participants older than age 70 and that, based on the Fund's experience, more than 200 terminated vested participants over age 70 are expected to commence benefits during the next five years.

Because the Fund's assumption that terminated vested participants who have not commenced benefits by age 70 will never commence benefits is contrary to the Fund's actual recent experience and the Fund did not provide support for this assumption, Treasury has concluded

---

<sup>27</sup> Application at 6.1.59-60, and 7.2.57-58.

that this assumption is not reasonable. Therefore, the proposed suspension does not satisfy the statutory requirement that it be reasonably estimated to avoid insolvency.

*Additional Concerns with the Application*

As the MPRA case team has previously explained to you and your representatives, the Application includes a number of other actuarial assumptions and methods that have raised concerns, but that are not relied upon as a basis for Treasury's decision to deny the Application. Treasury remains willing to discuss these issues with you further.

**CONCLUSION**

For the reasons set forth above, Treasury has concluded that the Application fails to demonstrate that the proposed suspension satisfies the requirement that it be reasonably estimated to achieve, but not materially exceed, the level that is necessary for the Fund to avoid insolvency. As a result, the Application fails to demonstrate that the proposed suspension satisfies the limitations set forth in Code § 432(e)(9)(D), which is required for approval of a proposed suspension. Accordingly, the Application is denied.

This notification letter will be made public in order to inform plan participants and beneficiaries of the outcome of Treasury's review.

Respectfully,



Robert Neis  
Benefits Tax Counsel