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July 31, 2018

Actuarial Standards Board
1850 M Street, NW, Suite 300
Washington, DC 20036
Via email to comments@actuary.org

Re: Comments on Exposure Drafts of Proposed Revisions to ASOP Nos. 4, 27 and 35

Members of the Actuarial Standards Board:

The Pension Committee, Public Plans Committee and Multiemployer Plans Committee of the American Academy of Actuaries¹ (the Committees) appreciate the opportunity to present the following comments to the Actuarial Standards Board (ASB) regarding the exposure drafts of the proposed revisions to ASOP No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*, ASOP No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*, and ASOP No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations*. We are providing comments relevant to each specific standard, and general comments applicable to the revision of all three standards collectively. Because of the interrelated nature of these revisions, we are providing our comments in one consolidated letter rather than responding with separate letters with comments on each exposure draft.

We greatly appreciate the efforts of the ASB to develop Actuarial Standards of Practice (ASOPs) for the profession, and we believe that these exposure drafts contain some substantive improvements to the ASOPs. While we believe much good work has been done to improve these three ASOPs, we also have some concerns about certain aspects of the proposed revisions.

Before offering comments on specific sections of the exposure drafts, we have several observations regarding issues that apply across the exposure drafts that we offer for the ASB's consideration. Throughout the remainder of this letter, unless otherwise noted, references to any of the three ASOPs are to the exposure drafts. When referring to the standards as in effect as of the issuance of this letter, we will refer to the "current standard(s)."

¹ The American Academy of Actuaries is a 19,000+ member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

General Comments on Proposed Revision of ASOP Nos. 4, 27, and 35

- The proposed revisions to ASOP Nos. 4, 27, and 35 may require substantial effort to implement. In addition to updating valuation processes and reports, actuaries will need to address these changes with the plan sponsors that they work with, possibly including discussions of expanded scopes of engagement. We thank the ASB for proposing a 12-month deferred effective date for these new ASOPs when finalized, since actuaries will need that time to implement any changes.
- Section 3.6.3 of ASOP No. 27 and Section 3.4 of ASOP No. 35 would permit the phase in of actuarial assumptions over a period of years, so long as the assumption in each year of the phase-in period is reasonable. While this approach does sometimes occur in practice, we are concerned that including this provision in the ASOPs might signal an endorsement of this practice. We believe it is better to fully reflect assumption changes when the actuary deems those changes appropriate, and consider use of an output smoothing mechanism if needed to manage cost or contribution levels.

If the effect of assumption changes needs to be smoothed, we believe the preferred approach would be to phase-in the effect in the outputs (i.e., the measured benefit obligations or costs), rather than the assumption inputs. The current standards already require assumptions selected by the actuary to be reasonable. It is unclear to the signatories how this change will improve actuarial practice. If the ASB decides to retain this provision, we suggest adding a requirement that the effect of full recognition of the assumption change (i.e., the benefit obligation, contribution, and/or cost using the ultimate assumption) be disclosed.

- The exposure drafts all refer to a concept that the assumption(s) selected by the actuary have “no significant bias (i.e., it is not significantly optimistic or pessimistic).” (ASOP No. 4, Sections 3.8 and 3.20(a), ASOP No. 27, Section 3.6(e), and ASOP No. 35, Sections 3.2.5(e) and 3.10.4) This requirement generally applies to both individual assumptions and the combined effect of all assumptions. We suggest that this concept be refined to provide that the assumption(s) selected by the actuary are not expected to have significant bias (i.e., it is not expected to be significantly optimistic or pessimistic). The actuary cannot know whether an assumption will turn out to be significantly biased without seeing how experience plays out and looking back at that experience versus the assumption. Therefore, we believe the ASOPs should clearly state that the actuary is only held to this standard with respect to what is expected when selecting the assumption.
- We appreciate the effort the ASB made in reviewing the wording in current ASOP Nos. 4, 27, and 35. We found that there were a significant number of subtle proposed wording changes in the exposure drafts and that it was difficult to find all of the small subtleties in the proposed changes. Therefore, we are concerned that actuaries may not notice all of the changes and suggest that a version that tracks all of the changes be posted for use by the US actuarial profession (not just potentially available upon request).

Also, it is not clear whether these subtle changes were intended to change actuarial practice, clarify the existing language, or improve the consistency of language across the various standards. In this letter, we point out some places where the ASB's intentions about future actuarial practice as a result of wording changes are not clear. However, there were many other changes that were unclear and are not mentioned in this letter. While we believe it is vital for these ASOPs to be written as clearly as possible, we ask that the ASB try to propose wording changes only when you envision a change in actuarial practice (which should be cited as a notable change in an exposure draft), when the current wording is inconsistent across the standards, or when the existing language has the potential to be substantively misleading. If changes are made solely to accomplish minor improvements in readability, clarity, or consistency, a general note to that effect in the release memorandum or an appendix summarizing key changes would be helpful.

- There was no change to the definition of "Measurement Date" in Section 2.16 of the ASOP No. 4 exposure draft. However, in Section 2.2 of the ASOP No. 27 exposure draft and Section 2.4 of the ASOP No. 35 exposure draft, the words "(sometimes referred to as the "valuation date")" were removed from the end of the definition. We think that the definition should be consistent in the three ASOPs and, if the phrase is removed from all three, we would like to understand the rationale for the change and the associated expected change in future actuarial practice, if any.

Also, certain actuarial tasks involve the determination of pension obligations as of several dates. Consider the following examples:

- Deterministic or stochastic forecasts involve the determination of pension obligations for a series of future dates
- Gain/loss analysis can involve the determination of pension obligations as of several dates.
- Back-testing to evaluate the effectiveness of alternative plan management approaches can involve the determination of pension obligations as of several past dates.

We suggest that the standards could be improved by recognizing that actuarial tasks that involve liability calculations at multiple dates may have a single measurement date. The actuarial task may also entail the calculation of pension obligations at other dates, but the economic data or estimate of future experience as of those dates may not be appropriate to use in the determination of these obligations, and may not always be based on assumptions that meet the reasonableness requirements (for example, stress-testing scenarios in a deterministic forecast).

- We support the change to the requirement of Section 4.1.2 of ASOP Nos. 27 and 35 regarding the rationale for actuarial assumptions selected by the actuary. We appreciate the clarification from the ASB as to the intent of these provisions in the current standards and believe this is as an appropriate strengthening of actuarial practice.

Specific Comments on Proposed Revisions to ASOP No. 4

Answers to ASB's Questions

As the ASB requested, following are our responses to the questions posed in the exposure draft to ASOP No. 4:

1. *Section 3.11, Investment Risk Defeasement Measure, requires the calculation and disclosure of an investment risk defeasement measure when the actuary is performing a funding valuation. The guidance allows for discount rates to be based upon either U.S. Treasury yields or yields of fixed income debt securities that receive one of the two highest ratings given by a recognized ratings agency. Are these discount rate choices appropriate? If not, what rate choice would you suggest?*

We believe that these discount rates would be appropriate for this purpose in many contexts, but would be inappropriate in others. Therefore, we do not believe that ASOP No. 4 should mandate any particular discount rate or rates. As discussed more fully in our comments on section 3.11 of the exposure draft, we believe that the ASB should employ a principle-based approach to defining this measurement.

2. *Under certain circumstances, section 3.20, Reasonable Actuarially Determined Contribution, requires the actuary to calculate and disclose a reasonable actuarially determined contribution. Do the conditions in this section describe an appropriate contribution allocation procedure for this purpose? If not, what changes would you suggest?*

Generally, we agree that the conditions outlined in Section 3.20 are appropriate in defining a contribution allocation procedure for an actuarially determined contribution (ADC). In particular, we note that the requirement in Section 3.20(b) that the normal cost is based on the plan provisions applicable to each participant precludes the use of the ultimate entry age cost method.² We agree with this provision and support its inclusion.

We have offered comments elsewhere in this letter regarding sections 3.13 through 3.16 which are incorporated by reference into the definition in 3.20. Those comments should be considered in the context of our response to this question.

We also note the disclosure requirements in Section 4.1 supplement the basic requirement to disclose an ADC by imposing other disclosures on specific components of the ADC, such as the requirements in Section 4.1(x) to describe any changes in the cost allocation procedure, the reasons for the change and the general effect of making the change. This disclosure requirement is important and addresses concerns raised by members of the Committees that an actuary could change the actuarial cost method, amortization period, or other components of the contribution allocation procedure annually to produce an ADC that closely matches the actual "fixed rate" contributions found in some public

² Under the ultimate entry age cost method, the normal cost is based on an open tier of benefits even for members not in that tier as of the measurement date. This is not to be confused with an entry age cost method under which the normal cost is based on a member's current (but not historical) accrual rate.

sector plans.³ For these “fixed rate” plans, the Committees believe the ADC should be determined on a consistent basis year-to-year. Requiring disclosure of any changes in the method of determining the ADC should be sufficient to achieve this consistency, while permitting the actuary to make changes when there is an appropriate reason to do so.

The Section 4.1 disclosure requirements also address the Committees’ concerns about rolling amortization methods by requiring either a disclosure that the method will not fully amortize the unfunded actuarial accrued liability (Section 4.1(v)) or that the method has been changed to reset the amortization period so it does not reduce annually, and the reason for such change (Section 4.1(x)). The ASB may want to consider further strengthening the disclosure requirements by requiring that the actuary disclose if past changes to the ADC calculation follow a consistent pattern, and if so, what the implications of that pattern are.

Additional Comments on Proposed Revisions to ASOP No. 4

- Section 1.2—The third sentence of the fourth paragraph from the end of Section 1.2 (i.e., “This ASOP addresses broader measurement issues including cost allocation procedures and contribution allocation procedures, and provides guidance for coordinating and integrating all of these elements of an actuarial valuation of a pension plan.”) seems to relate more to the purpose (Section 1.1) of the ASOP than the scope (Section 1.2). Also, the sentence doesn’t seem critical to the purpose of the paragraph, which is to clarify which standard governs in the event of a conflict between various ASOPs. Therefore, we suggest you consider deleting this sentence since the same concepts can be found in the last two sentences of Section 1.1.
- Sections 2.5 and 2.12—The new definition of “Funding Valuation” and the definition of “Actuarial Valuation” don’t refer to each other or have similar wording. In our view, a “Funding Valuation” is very closely related to an “Actuarial Valuation,” and better coordination between the definitions would help actuaries understand the distinction between these two terms as they impact the ASOPs.
- Section 2.18—We believe that the proposed definition is ineffective. As written, it describes the intention of the technique (reducing the volatility of results) and lists several examples. The first sentence in the definition could be read to include *any* techniques that are intended to reduce volatility, including those that smooth inputs. We use the term “output smoothing” to describe smoothing of results, not of inputs.⁴ We believe that smoothing asset values, for example, would meet the proposed definition of an output smoothing method. Additionally, the first example of “phasing in the impact of assumption changes on contributions” is unclear as to whether it is describing phasing in the change in the assumption inputs (as addressed in Sections 3.6.3 of ASOP No. 27 and 3.4 of ASOP No. 35) or using the changed assumptions and blending those results with the pre-assumption change results. We consider smoothing of assumptions or asset values

³ In a “fixed rate” plan, the contribution rate per participant is “fixed” (often by statute) rather than driven by annual funding valuation results that would presumably be determined on a basis that would meet the definition of an ADC.

⁴ American Academy of Actuaries, Issue Brief: “[The Pension Protection Act: Successes, Shortcomings, and Opportunities for Improvement](#),” April 2018.

to be input smoothing. When output smoothing is utilized, the assumptions and asset values used should be based on the actuary's observation of the estimates inherent in market data or the actuary's estimate of future experience, or a combination thereof.

The current version of ASOP No. 4 describes an output smoothing method as an approach to “adjust the *results* of a contribution allocation procedure”. [Emphasis added.] Although not perfect (in part because the output smoothing method was also included as part of the contribution allocation procedure), this avoided the confusion between input and output smoothing that exists in the exposure draft. We suggest that the definition describe output smoothing as an approach to “adjust the preliminary results of the contribution allocation procedure.”

Because the results of one calculation are often used in another calculation, the distinction between inputs and outputs is contextual. We suggest that the more specific term “Contribution Output Smoothing Method” be used in the ASOP. Moreover, although both the proposed and current wording in ASOP No. 4 refer to an output smoothing method only in the context of a contribution allocation procedure, similar approaches are also used to reduce volatility in other contexts. For example, an actuary may use output smoothing when allocating costs to divisions or companies within a controlled group sponsoring a plan. Using the term “Contribution Output Smoothing Method” would clarify that the actuary is not precluded from using output smoothing in contexts other than contribution allocation procedures.

- Sections 2.22 and 2.23—The wording in these sections does not exactly match the wording in Sections 2.5 and 2.6 of the ASOP No. 27 exposure draft and in Sections 2.6 and 2.7 of the ASOP No. 35 exposure draft. In the second sentence of Sections 2.22 and 2.23 of the ASOP No. 4 exposure draft, the definitions use the word “set” when “selected” is used in the other two exposure drafts. The definitions should be the same to avoid confusion and, although the defined term uses the word “set,” we suggest consistent use of the word “selected” in the definitions, since that word better describes the process used and other wording in the ASOPs.
- Section 3.2(u)—The wording was changed from the current ASOP to refer to the action to “assess” instead of “evaluate.” In addition, we note that both terms are used in all three of the ASOPs, but neither “assess” nor “evaluate” are defined terms in ASOP No. 1. It is unclear to us if the change was made so that there would be a change in future actuarial practice. If a change in actuarial practice is expected as a result of this wording change, it may be helpful to define “assess” and “evaluate” to help actuaries understand the distinction.
- Section 3.3—In rewording the examples of Section 3.3, one of the examples in the current standard was left off the list: “market value assessments.” It is not clear why this was removed as an example. We believe this is still a reasonable purpose of a measurement that is not eliminated due to the new Investment Risk Defeasement Measure (IRDM) provisions, especially since IRDM is only applicable to funding valuations. It would be helpful to understand why the ASB decided to eliminate this as a

purpose for measurement and to confirm that the ASB still believes this to be a valid purpose.

- Sections 3.4.2 and 3.5.1—The last sentence of these sections were reworded. However, when they were reworded, the fact that an actuary “may, but need not,” reflect post-measurement date events was removed. Although the new wording doesn’t preclude the inclusion of post-measurement date items, it is no longer clear. We believe it is important to be clear in the standard and include this option for the actuary to reflect post-measurement date events, similar to what is provided in the current standard.

Section 3.8—The current version of this section stops after the first sentence, which refers actuaries to ASOP Nos. 27 and 35. The exposure draft now has additional wording that addresses the “no significant bias” criteria with respect to the aggregate set of assumptions selected. This same language appears in Section 3.10.4 of ASOP No. 35, which cross-references to ASOP No. 27 to encompass the complete set of economic and demographic assumptions. We believe all guidance regarding the selection of actuarial assumptions should be found in ASOP Nos. 27 and 35 and not in ASOP No. 4. We suggest that Section 3.8 of ASOP No. 4 should remain as just the one sentence referring to ASOP Nos. 27 and 35 for assumption-setting guidance, and the guidance in Section 3.10.4 of ASOP No. 35 regarding consideration of the aggregate reasonability of the entire assumption set should be added to ASOP No. 27.

Section 3.11—Our comments on the IRDM fall into three categories. The first category focuses on the purpose of the measurement. The second category consists of observations regarding the potential value that could be provided by such a measure, together with the limitations it would have. The third category provides feedback on the details of how the exposure draft implements the IRDM.

Purpose of the Measurement

Before requiring a specific disclosure that may involve additional liability calculations that an actuary may not already be providing, we believe it is critical to clearly define the purpose of the disclosure and assess expectations of the value of the disclosure

The purpose of the IRDM and expectations for how it should or would be used are not fully clear in the exposure draft. The name and the description provided of “an obligation measure to reflect the cost of effectively defeasing the investment risk of the plan” implies that the purpose is related to the plan’s investment risk. However, the methodology prescribed in the exposure draft appears to be intended to price a settlement for a fixed set of future payments, whether or not the pension obligation consists of a fixed set of future payments. We believe the goal of the IRDM is to provide information that improves stakeholders’ understanding of the investment risk present in pension plans, and that the exposure draft should more fully explain the purpose.

Potential Value of the IRDM

The Committees believe that investment risk disclosures are critically important, and that

a measurement similar to the IRDM could help address this need. For this reason, we are generally supportive of the proposed requirement. However, we also note that within the actuarial community, there are a wide range of views on whether the IRDM is the optimal way to approach this issue, or whether the recently introduced risk disclosure requirements of ASOP No. 51 provides a better framework for improving stakeholder understanding of pension investment risk. The differing views on the usefulness of the IRDM are partially attributable to differing assumptions as to the purpose of requiring disclosure of this measure, which is not clearly stated in the exposure draft. The ASB may want to consider whether it is appropriate at this time for the standards to encourage the disclosure of the IRDM, while providing actuaries with the discretion to alternatively disclose certain quantitative analyses under ASOP No. 51.

While pension plans are subject to many risks, investment risk is noteworthy for two reasons. The first is that in a majority of pension plans, it is the largest source of risk. Second, in contrast with other risks such as uncertain retirement patterns and mortality rates, plan sponsors willingly choose to bring investment risk into their plans by investing in assets other than those that best match liabilities (generally bonds with minimal default risk). Plan sponsors can also reduce this risk at any time by increasing allocations to matching assets. Plan sponsors choose to accept investment risk because they believe that the resulting returns in excess of those attainable with matching assets will be sufficient to justify the uncertainty associated with risky assets.

The IRDM has the potential to help illustrate important information about investment risk in pension plans. For example, the IRDM represents an estimate of the amount of assets that the plan would need to hold in order to protect participant benefits that are attributable to past service⁵ from investment risk without any further contributions. Additionally, a comparison of the IRDM and the plan liabilities calculated using the same actuarial cost method and an expected return discount rate is a measure of the gains that the plan sponsor expects to realize due to the investment in other than matching assets.

The IRDM provides important information about investment risk in pension plans, but it also has limitations. A significant factor in the evaluation of the level of investment risk that is affordable is the ability of the plan sponsor to offset adverse experience with additional contributions, and the IRDM provides no information about the plan sponsor's ability to pay any additional contributions that may be needed. The probabilities associated with various degrees of over and under performance are similarly outside the scope of the information that the IRDM can provide. The IRDM also does not quantify the higher benefit levels that the plan promises based on expected investment returns above bond yields, nor does it address the impact that adverse investment experience that the plan sponsor is unable to offset with additional contributions could have on benefit security. We also recognize that it may be optimistic to believe that simply disclosing an

⁵ As discussed later in our comments, we believe the IRDM should be defined using a principles-based approach that would permit the use of the same funding method that is used for other purposes. The portion of the present value of benefits that is attributable to past service would be determined by the funding method.

IRDM will change how the users of actuarial analyses view pension obligations and risks⁶.

Despite its limitations, the calculation and disclosure of an IRDM has the potential to enhance the transparency of investment risk in pension plans. By calling attention to the difference between the cost of eliminating investment risk and the actual funding target employed by the plan sponsor, the IRDM will encourage closer examination of the level of investment risk that is present in the plan. To the extent that it does not provide all relevant information related to this risk, it may serve to stimulate additional analysis and consideration that further improve understanding. We also note that various outside parties often attempt to estimate their own IRDM-type measurements where one is not disclosed, but due to a lack of information, these estimates may be inaccurate. Having such a measurement calculated by a plan actuary could provide greater accuracy in these situations.

Implementation Concerns

While we recognize the potential value of the IRDM, we also have some concerns related to the details of how it is defined and communicated.

We recommend the adoption of a principle-based approach towards defining the IRDM in lieu of prescribing any particular discount rates or funding method. As currently defined, the IRDM specifies a specific actuarial cost method and a discount rate consistent with the yield on one of two hypothetical bond portfolios, whether or not these requirements are consistent with the purpose of the measure. This approach is contrary to the way standards have normally been set. In fact, Section 3.1.4 of ASOP No. 1 explicitly states that ASOPs are principles-based.

A better approach to providing guidance relating to an IRDM would be to clearly establish the purpose of the measurement and provide the actuary with factors to consider in selecting the assumptions and methods used to calculate the measurement. The current prescriptive approach could lead to the disclosure of meaningless or misleading results. For example, the benefit payments from hybrid benefit plans can be sensitive to changes in the economic environment (e.g., cash balance plans with variable interest credits, variable annuity plans, gain-sharing plans, plans that pay variable lump sums, and plans with variable cost-of-living adjustments). In these plans, simply discounting projected cash flows using rates derived from a yield curve may not produce a benefit obligation that provides useful information about the investment risk.

If, for example, the benefit obligation is to pay the accumulation of a notional amount assuming it is invested in the S&P 500, the minimal risk asset is not Treasuries or high quality fixed income securities, but an S&P 500 index fund. Section 3.5.3 of the current

⁶ For example, it is not clear that the mandatory disclosure of current liability for multiemployer plans, and the voluntary disclosure of measures similar to the IRDM by New York City and the State of Washington, have caused the sponsors of those plans to evaluate pension investment risk differently than other plans.

ASOP No. 4 recognizes the complexities presented by benefit structures that vary based on economic conditions and requires the actuary to consider alternative valuation procedures. However, when calculating the IRDM as currently defined, it may not be permissible to consider such alternative valuation procedures without deviating from the standard. A principle-based approach to defining the IRDM would enable the standard to more effectively address the full spectrum of plan designs.⁷ Care would need to be taken to ensure that such a definition effectively captures the objective of the IRDM while being flexible enough to address a wide range of designs.

In addition to prescribing two acceptable discount rate bases, the IRDM prescribes the use of the unit credit actuarial cost method. If the purpose of the measurement is related to the investment risk of the plan, it is not necessary to define the actuarial cost method to be used. In fact, requiring an actuarial cost allocation method that differs from the one used to fund the plan may inadvertently cause confusion by introducing factors unrelated to the investment risk into the analysis. Section 3.4 of ASOP No. 51, for example, indicates that one method for the assessment of risk is “a comparison of an actuarial present value using a discount rate derived from minimal-risk investments to a *corresponding* actuarial present value from the funding valuation or pricing valuation.” [Emphasis added.] For a plan that uses the entry age actuarial cost method for its funding valuation, this method of assessing the risk would compare the entry age actuarial accrued liability from the funding valuation to the entry age actuarial accrued liability using a discount rate derived from minimal risk investments. It is noteworthy that ASOP No. 51 does not even suggest a comparison to a unit credit measure if such a measure is not used in the funding valuation. While this comparison does not actually assess the risks, it does estimate the cost to mitigate the investment risks, which we believe is the purpose of the IRDM.

There are numerous common measures applicable to certain types of pension plans that are already calculated and that are similar in nature to the IRDM, but it is not apparent they would meet the current definition. For example:

- Current Liability as defined in Internal Revenue Code (IRC) Section 431(c)(6)(D), which is calculated and disclosed for multiemployer pension plans, also uses accrued benefits, the traditional unit credit cost method, and the same actuarial assumptions used for funding other than discount rate and mortality table. This measure, however, uses a discount rate based on 30-year Treasury rates that would not necessarily be consistent with the rate derived from matching the Treasury yield curve with the pattern of benefits expected to be paid in the future. Additionally, it is unclear if the prescribed mortality table would be acceptable for this purpose, as it is neither used in the funding valuation nor is it based on estimates inherent in market data.
- The IRC Section 430 funding target for single-employer plans (without regard to the interest stabilization corridor) by definition meets the requirements of parts (a), (b) and (d), but it’s not clear that the Section 430 segment rates meet the

definition in part (c)(2), and, if they do, the use of a 24-month average adds further uncertainty that this measure would be considered an IRDM.

- The accumulated benefit obligation under Accounting Standards Codification (ASC) No. 715 determined for many single-employer plans (other than those that don't prepare US Generally Accepted Accounting Principles (GAAP) financial statements, such as many very small employers) is based on accrued benefits, the traditional unit credit cost method, and frequently a discount rate that would meet the definition of Section 3.11(c)(2). However, the actuarial assumptions used may not be the same as used in the funding valuation (e.g., mortality tables), or based on estimates inherent in market data.

A principle-based approach to defining the IRDM would provide actuaries with the discretion to decide whether any of the existing measures adequately satisfy the intent of the IRDM requirement, or whether a new liability measure must be calculated. To the extent that a readily available measure deviates only modestly from the IRDM requirement, we believe it would be reasonable to allow the actuary to use that readily available measure, along with commentary about the nature and magnitude of such deviation.

Defeasement is a term that is primarily used in the analysis of bond payment obligations, and may not effectively communicate the purpose of this measurement to pension actuaries, particularly with respect to benefit plans that incorporate hybrid or variable benefit designs. Section 3.4 of ASOP No. 51 discusses the calculation of “an actuarial present value using a discount rate derived from minimal-risk investments.” This definition appears to be consistent with the purpose of the IRDM, and could more easily be applied to nontraditional plan designs. Defining the purpose of the IRDM in a similar manner to the ASOP No. 51 minimal-risk concept, while eliminating any prescriptions related to specific discount rates or actuarial cost methods, would help ensure that the purpose of the measurement is clear.

An additional potential source of confusion is the interaction between the existing ASOP No. 51 requirements related to pension risks and the proposed, new ASOP No. 4 IRDM requirement. ASOP No. 51 addresses the assessment and disclosure of risks for pension plan funding valuations, clearly defining a process by which an actuary should identify, assess, and in certain circumstances recommend to the intended user of the actuarial communication that further analysis is warranted. If the purpose of the IRDM is related to investment risk, it is confusing to include it in ASOP No. 4 instead of ASOP No. 51. This confusion is compounded by the difference between the “minimal-risk” measure referenced in Section 3.4 of ASOP No. 51 and the IRDM requirement in ASOP No. 4. The “minimal-risk” measure would likely be a different measure than the IRDM as currently defined because it would be based on the same actuarial cost method as is used for funding and might take into account plan provisions for risk-sharing that the IRDM might not. If they are intended to be different measures, it would be helpful for the ASB to provide clarity as to the intended difference.

- We also recommend modifying Section 4.1(o) of ASOP No. 4 to include as a required disclosure the purpose of the IRDM, so the users of the actuarial communication have the necessary background to evaluate the relevance and implications of the IRDM.
- Section 3.13(a)—The term “normal cost” is defined to include both the actuarial present value of projected benefits and expenses, if applicable. However, the term “normal cost for benefits” is not defined. It is not clear what this term means as expenses paid from pension plans are generally used for services that support the payment of benefits. Instead of developing a new defined term, that we expect was meant to be the defined term of normal cost without expenses, we believe it would be more clear in the first sentence of the second paragraph of (a) to adjust the wording to refer to the fact that the normal cost for a plan without benefits accruing might just be the expenses, if applicable, and not the actuarial present value of projected benefits. In addition, we believe the “and” in that sentence should be “and/or” since one of those could be true or both could be true.

The last sentence of (a) provides for treatment of active participants who are no longer accruing benefits under a plan, and this provision is applicable through the entire standard. We agree this treatment is appropriate for the discussion of the actuarial cost method, but it may not be appropriate for other components of the contribution or cost allocation procedure. A common approach used by plan sponsors under ASC No. 715 when accounting for a frozen plan treats all of a plan’s participants as inactive, even active employees who are not accruing benefits, for purposes of determining the period over which to amortize prior service costs and actuarial gains/losses. This approach is generally considered to be consistent with the guidance provided by the Financial Accounting Standards Board (FASB). The determination of the amortization period for determining plan costs is outside the scope of Section 3.13, however use of the word “standard” in this sentence would appear to make this generally accepted approach inconsistent with the guidance in ASOP No. 4. We believe the scope of this provision should be limited to this section 3.13, rather than to the entirety of ASOP No. 4.

- Section 3.13(c)—This section refers to “normal cost for benefits” as did Section 3.13(a). It is not uncommon for an actuary to reflect some forms of expenses (for example, a contract expense) in normal cost while reflecting others, such as investment costs, in the investment return assumption. Therefore, we believe it would be clearer to indicate that expenses may be reflected “as a component of normal cost and/or” as an adjustment to the investment return or discount rate assumptions.
- Section 3.14—We support the principles outlined in this section, but we are concerned that the amortization method as defined does not anticipate the use of many common amortization methods, including methods that establish a new amortization base on each measurement date and those that separate the causes of the change in unfunded actuarial accrued liability (UAAL) at a measurement date.⁸

⁸ For example, a plan may measure the UAAL in year 1 and establish an amortization method that is compliant with this section. In subsequent years, the measured UAAL is compared to the unamortized balance of the base(s) established in the preceding year(s), with the difference (which may be positive or negative) established as a new

While the amortization period chosen for these methods is reasonable for the base(s) established for any given year, it is possible that the total amortization payments at a given measurement date could be greater than or less than interest on the total UAAL, violating the conditions outlined in the proposed ASOP language. To address this concern, we recommend adding an additional subsection 3.14(c) as follows:

If the amortization method is applied separately to changes in unfunded liability (sometimes called layered amortization) then this section can be applied separately to each layer (and not applied just to the total amortization payment compared to the total unfunded liability). The amortization period applied to layers from the same source should be at least as great for decreases as for increases (e.g., gains should have the same or longer amortization period as losses).

We note that as worded, section (b) requiring amortization over a reasonable period of time only applies when payments do not exceed nominal interest on the UAAL. Consider an amortization method that reflects nominal interest on the UAAL plus \$1. This method would not have to comply with conditions (a) and (b), but would also not fully amortize the UAAL over a reasonable period of time. We suggest restructuring this paragraph to say the payment must either exceed nominal interest on the UAAL or must not increase more rapidly than expected payroll growth, with the reasonable time period requirements currently in section (b) applying in all cases.

We also believe it would be prudent to modify Section 3.14(a) to state that payments do not increase, or do not increase more rapidly than the expected growth in plan sponsor payroll assuming no increase in the number of active employees. This language would be helpful in addressing the establishment of an appropriate method for closed plans. As currently worded, closed plans may be forced into level dollar amortization immediately upon plan closure in situations where a level percentage of payroll amortization may be an appropriate amortization method for at least some period of time.

Finally, these limitations are appropriate for a plan that is less than 100% funded to ensure that there is a reasonable plan to return to full funding. For plans in surplus, however, if Section 2.7 is interpreted to mean that a surplus is a negative unfunded actuarial accrued liability, then these limitations may force the rapid utilization of the surplus rather than reserving it as a cushion against future losses. We suggest that the ASB consider specifying that some or all of any surplus may be excluded from the amortization calculation.

base in that subsequent year. The new base is amortized in accordance with this section, and may be further split into multiple bases that isolate actuarial gain or loss, changes in plan benefits, and assumption changes. The unamortized portion of each base is typically determined as a “write-down” of the previous year’s balance at the assumed interest rate, or as the present value of the remaining scheduled amortization installments using the current year interest rate.

- Section 3.16—This section uses the adjective “reasonable” several times but does not provide any guidance on how an actuary should evaluate what might be considered reasonable. We suggest the ASB consider adding wording about factors the actuary might consider in determining what might be reasonable. The considerations in Sections 3.14(b) and 3.17 are examples of the sort of guidance that might prove helpful.

The term “actuarially determined contribution” is defined to be the result of a “contribution allocation procedure,” which is in turn defined to optionally include an output smoothing method. All instances of actuarially determined contribution that are intended to exclude the output smoothing should therefore explicitly state this. We suggest adding the phrase “without output smoothing” to references to actuarially determined contribution in items (a) and (c).

We also suggest adding a new item (c) (and renaming the current item (c) as item (d)), worded as follows:

When considering output smoothing in conjunction with the other components of the contribution allocation procedure (such as input smoothing and amortization methods), the total amount of smoothing contained in the smoothed contribution result is reasonable.

- Section 3.17—We observe that the language in the current standard encouraging the actuary to consider “factors such as” was removed and instead a specific list that the actuary should consider is put forth. We think that the more open language should be restored, as there may be other factors that an actuary might wish to consider. We do not see the value in limiting the considerations to the factors listed.

Removing the example of “a desire to achieve a target funding level within a specified time frame” as a relevant “input received from the principal” removes valuable guidance from the ASOP, and we suggest that it be restored.

The items listed in (a) through (c)—benefit security, intergenerational equity, and stability or predictability of costs or contributions—are important and appropriate, and we are pleased to see them added. However, we suggest changing the listing to remove the separate listing of (a) through (c) and instead reword (d) to list a balance amongst these three items (with (a), (b), and (c) listed here) as the factor to consider. It would also be helpful to the profession to include examples of benefit security measures that might be considered, and how intergenerational equity might be reflected, as it is not feasible as an absolute measure (for example, funding unexpected mortality improvements for those participants already in pay status).

- Section 3.19—The language used in the first paragraph is confusing. In the first sentence, this section excludes funding valuations using a prescribed assumption or method set by law. But the second sentence provides that “contributions set by law” constitute a funding policy, which is part of what is to be assessed in the first sentence. It is not fully clear how contributions calculated using a prescribed assumption or method set by law differs from “contributions set by law” from the wording here. A more rigorous definition would

help avoid the possibility of confusion. Note that the same language is used in Section 4.1(v)—additional clarity would be helpful in both places.

- Section 3.23—This section was not changed from the current standard and does not acknowledge the new ASOP No. 51, which requires an identification of risks that could affect the plan’s future financial condition and an assessment of their effects when performing a funding valuation. Although ASOP No. 51 does not require a quantitative risk assessment, volatility is now in the scope of all funding valuations and costing valuations. Please clarify the interaction between this section and ASOP No. 51 and indicate when this section should or should not be invoked. The ASB may consider whether this section should be reworded to just refer to ASOP No. 51 instead of providing different requirements. We also note that there is no specific disclosure requirement tied to this Section 3.23, unless the disclosure in Section 4.1(dd) is meant to inform the intended user of the analysis in Section 3.23.
- Section 3.24—The first two sentences refer to language included in an actuarial communication about the party responsible for each “material” assumption and method. It is not consistent with the language in ASOP No. 27, Section 4.2 or ASOP No. 35, Section 4.2 and we think the references in ASOP Nos. 27 and 35 should be updated to be consistent. In addition, it does not seem to be in the right location within ASOP No. 4, and we suggest this concept be included in Section 4, since that outlines the communications and disclosures required.

We also suggest that the ASB consider that it is likely sufficient that this section just reference the appropriate sections in ASOP Nos. 27 and 35 with respect to the assessment of assumptions, instead of restating or summarizing the guidance in those ASOPs. This would help avoid confusion and make sure the actuary is focusing on just one ASOP for appropriate practice when assessing assumptions.

- Section 4.1(t)—This section is part of Section 4.1(k) in the current ASOP, but the final sentence in Section 4.1(k) of the current standard (i.e., “For purposes of this section, the actuary should assume that all actuarial assumptions will be realized and actuarially determined contributions will be made when due;”) is not in Section 4.1(t) (although it is found in Sections 4.1(u) and (v)). The caveat that assumptions will be realized and contributions made seems important and should apply to all of the requirements where the actuary must assess implications during future time periods. We suggest that the ASB consider placing it as a general condition that applies to all the assessments.
- Section 4.1(u)—This section requires a new determination of the period of time the actuarially determined contribution is expected to remain less than the normal cost plus interest on the unfunded actuarial accrued liability. We request the ASB clarify whether this requires a quantitative analysis or may be satisfied by a qualitative discussion. If a quantitative analysis was contemplated, we request that the ASB consider allowing the option for a qualitative analysis, based on the actuary’s judgment, due to the complexity that can be involved with a complete quantitative analysis.

The ASB may also want to consider whether an alternative measure might be more appropriate, such as evaluating the actual funding policy instead of the ADC. If the plan has a fixed statutory rate, disclosing that it is never expected to exceed normal cost plus interest on the unfunded actuarial accrued liability could be powerful and might have prevented or limited some of the current underfunding situations.

- Section 4.1(aa)—It is not clear whether the “corresponding funded status” referred to in this section should be the one used in determining the ADC. Also, it is not clear what components should be used to determine the funded status—for example, would a market value of assets be more appropriate than a smoothed value? This language should be clarified to indicate which funded status should be disclosed. We suggest adding something like the following to the end of this section:

using the measure of plan assets and actuarial accrued liability used in the actuarially determined contribution

Specific Comments on Proposed Revisions to ASOP No. 27

- Sections 1.2 and 4.2—The ASB rewrote the following sentence in Section 1.2: “The standard also applies whenever the actuary has an obligation to assess the reasonableness of an economic assumption that the actuary has not selected.” Previously the sentence referred to “prescribed assumptions,” which refers to defined terms in Sections 2.5 (those set by another party) and 2.6 (those set by law). The reference to “prescribed assumptions” was clear in the original language. While the new wording is not unclear, the change raises a question as to whether there is an intended change in practice. If no such change is anticipated, we recommend restoring the original reference to “prescribed assumption.” A similar change in language was made in Section 4.2, and the same comment applies there.
- Section 3.1 (and elsewhere)—We observe that the term “evaluate” found in the current version of the ASOP has been changed to “assess.” Please see our comments above on this change in Section 3.2(u) of ASOP No. 4.
- Sections 3.5.2 and 3.5.3—The phrase “the actuary should consider” has been replaced by “the actuary should take into account”. “Should consider” is defined in ASOP No. 1. “Should take into account” is not. This is also found in Section 3.5.3 of ASOP No. 35. If the phrase “should take into account” is intended to convey different guidance to the actuary than “should consider,” then for clarity we recommend the ASB highlight the intended change in the summary of key changes when the final ASOP is issued.
- Section 3.6 –The first sentence of this section is awkward and appears to have no difference in meaning from the comparable sentence in Section 3.6 in the current version of ASOP No. 27. Please consider restoring the current language, or modifying it for clarity if intended to change current practice.

- Section 3.12—We observe the elimination of what had been the last paragraph of this section: “Assumption selected by the actuary need not be consistent with prescribed assumptions....” Although this can be inferred from other passages of the section, this explicit statement is helpful clarification. We suggest that this sentence be restored.
- Section 4.1.2—This section is clear regarding the disclosure requirements regarding the rationale for i) significant assumptions selected by the actuary and ii) assumptions selected by another party that the actuary determines to be reasonable. Please consider adding an explicit statement that this section does not apply to an assumption the actuary has not selected and made no determination of whether it is reasonable, as discussed in Sections 3.14 and 4.2 of ASOP No. 27 and ASOP Nos. 4, 6, and 41.
- Section 4.2—The guidance found in (a) and (b) each refers to Section 3.13. We believe that these references should be updated to 3.14, Assumptions Not Selected by the Actuary.
- Appendix 2—The exposure draft did not make any changes to the discussion in Appendix 3 of the current ASOP (referred to as “Appendix 2” herein) on the use of forward-looking expected arithmetic versus geometric returns as a discount rate. An Academy Practice Note that has been released as an [exposure draft](#) discusses this issue more fully. One of the important concepts from Appendix 2 that is discussed more fully in this Practice Note is that these approaches differ in focus between expected value outcomes versus median outcomes. We believe that Appendix 2 should include additional discussion of the possible consequences of these approaches related to their expected outcomes, as described in the practice note.

Specific Comments on Proposed Revisions to ASOP No. 35

- Sections 1.2 and 4.2—Please see our comments regarding these same sections in the ASOP No. 27 exposure draft.
- Section 3.2.4—The language in this section has been modified to include the statement “In addition, the actuary should not give undue weight to experience that is not relevant.” While we agree irrelevant experience should not be given undue weight, we question whether it should be given any weight at all. We suggest changing the wording to something similar to the following:

In addition, the actuary should give weight to experience that is appropriate to its relevancy to future expectations.

- Section 3.2.5—The first sentence of this section is awkward and appears to have no difference in meaning from the comparable sentence in Section 3.3.5 in the current version of ASOP No. 35. Please consider restoring the current language, or modifying it for clarity if meant to change current practice.
- Section 3.6.2—In contrast with the current version of ASOP No. 35, the language in the exposure draft is not clear in saying the actuary may need to select a marriage

assumption. The language in the current ASOP No. 35 is clear and concise, and is substantively the same as the proposed language in the exposure draft. Please consider modifying the language to clarify that a marriage assumption—in addition to an assumption regarding beneficiary ages—may be necessary.

- Section 3.7—We observe the elimination of what is the last paragraph of this section in the current version of ASOP No. 35: “Assumption selected by the actuary need not be consistent with prescribed assumptions....” Although this can be inferred from other passages of the section, this explicit statement is helpful clarification. We suggest that this sentence be restored.
- Section 3.10.4—This section provides that the actuary should select assumptions “such that the combined effect of the assumptions has no significant bias...except when provision for adverse deviations are included.” Unlike the current version of ASOP No. 35, it is unclear whether this “no significant bias” requirement applies solely to the combined effect of assumptions selected by the actuary or to all assumptions (including the effect of individual prescribed assumptions combined with those selected by the actuary). We believe the intent is the former and request that section is reworded to be similar to Section 3.8 of the ASOP No. 4 exposure draft, which provides that “the combined effect of the assumptions selected by the actuary has no significant bias....”
- Section 4.1.2—This section is clear regarding the disclosure requirements applicable to the rationale for i) significant assumptions selected by the actuary and ii) assumptions selected by another party that the actuary determines to be reasonable. Please consider adding an explicit statement that this section does not apply to an assumption the actuary has not selected and made no determination of whether it is reasonable, as discussed in Sections 3.9 and 4.2 of ASOP No. 35 and ASOP Nos. 4, 6, and 41.

We appreciate the ASB giving consideration to these comments. Please contact Monica Konate, the Academy’s pension policy analyst (konate@actuary.org; 202-223-7868), if you have any questions.

Respectfully submitted,

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