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Summary: Expert panelists explore the workings of the Actuarial Standards Board, including the process of standard development and the substance of some standards now being considered. There is particular emphasis on the life practice area and current work on cash-flow testing. Recent and potential changes in areas affecting all actuaries, such as qualifications, communications, and materiality, are also discussed. This is an opportunity to express concerns about standards and the process used and give input on future standards.

Mr. Sam Gutterman: Every actuary should be knowledgeable about actuarial standards of practice. Not only is the Actuarial Standards Board (ASB) and the standards themselves important to the actuary providing actuarial services in the U.S. but it is also important for actuaries to understand the process the ASB follows, because the better and more input that the ASB is provided, the better and more relevant will be the resulting standards. In addition, the existence of effective standards adds to the credibility of a profession. This is true both in the U.S. and internationally. This issue of actuarial standards is very important as I talk to regulators and accountants in trying to improve the standing of the actuarial profession.

I would like to introduce our presenters. Frank Irish has had a long and distinguished career with the John Hancock Life Insurance Company. He has served the profession in many capacities over the years. Relevant to this session, he has served on the ASB for the past six years. This is his last year on the ASB. He told me that his most memorable standard or activity was his leadership on the sales illustration standard. He's now retired and enjoying the actuarial profession, from a different prospective, by serving on the ASB.

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Ken Hartwell has a somewhat different background. He was born and educated in South Africa, became a fellow of the Institute of Actuaries in the 1960s, and was in South Africa until 1984, at which time he came to the U.S. He has recently joined Mercer. He has been a vice president of the American Academy of Actuaries (AAA) in charge of professionalism issues between 1996 and 1998 and is a new member of the ASB this year, serving a three-year term. Frank will provide an introduction to the ASB and standards; then Ken will be discussing the life insurance standards and some of the specific issues and standards that are coming up. Frank will then conclude.

Mr. Frank S. Irish: We actuaries are the professionals who make up our profession. I think it's important to us personally to understand the meaning of a profession in our working life. Being a member of a profession means better jobs for us. It means that people listen to us when we speak on our chosen subject as actuaries. Maintaining the status of the profession requires the efforts of a large number of us on boards, committees, and task forces. And the ASB, with its nine members, is one of these many groups.

I'm going to start out with some quotes from Ed Lew about professionalism and the ASB. Ed started out by saying, "The essential characteristic of a profession has come to be expertise in the area where professional services are performed. This requires setting of selective standards for admission into the profession, intellectual and practical training to acquire professional competency, and an organization to test such competence. To ensure that professional services are delivered in a manner expected of professionals, it has become necessary to lay down canons of professional performance and behavior in work situations, as well as procedures for maintaining discipline."

He goes on to say, "Standards of professional performance and behavior have been developed to meet the expectation of users of professional services, individual and corporate clients, government authorities, and the general public. Those seeking professional services turn for advice to professionals because of the trust they repose in the reputation and standing of the profession."

Thus, the element of public trust is important in maintaining us as a profession. Users should have the expectation that all actuaries will perform to high minimum standards. Ed also said, "Written standards of practice have been adopted in order to articulate more explicitly a profession's commitment to expertise and conscientious service, to assure regulatory authorities that they can depend on the profession to act effectively in the public interest and, more generally, to inform

users of professional services of what they have a right to expect by way of professional performance and conduct."

The nine ASB members come from all practice areas of the profession. Our principal job is to promulgate standards that represent what is considered generally accepted practice by the profession. This is an important point because we very consciously don't set standards that are much tougher than the current norms of behavior. Obviously, any time you set a standard you're limiting behavior. You're telling people it's all right to do this and it's not all right to do that. You can't avoid that, but we do try to adopt canons of professional expertise and behavior that meet what the profession at that point considers acceptable, and we listen very carefully to the profession in making this judgment. We do have to steer a course between providing a high standard of performance, while not unduly limiting practice.

The ASB is an independent body, not specifically part of any other actuarial body. This isn't generally understood. The relationship to the Academy is the most important relationship, but it is only a dotted-line relationship. As a matter of fact, the members of the ASB are not chosen by the Academy; they're chosen by a committee comprised of the president of each actuarial body. However, the AAA provides the ASB with staff support, meeting places, publishing, and all those sorts of services. We have a close relationship with the Academy, but no reporting relationship.

Of great importance is the fact that we have, at this point, five standing committees reporting to us. The members of these committees are not members of the ASB. They're members who have volunteered specifically for those committees, and it is true that the standards are, in fact, revised and written by the committee members, not by the ASB. The ASB revises wording and tweaks this and that, but the basic work on the standards is originated by the members of those five committees, who represent the four basic practice areas of our profession and one General Committee.

In some cases, a subject may not fall neatly within one of those five categories. Then it may be necessary to appoint a task force. The phrase "task force" implies that it is a temporary body chosen to do a specific task. One of these task forces was the Long-Term-Care Task Force. As a matter of fact, that had two lifetimes. We had a long-term-care standard adopted around 1990, which was written by a task force, and we recently adopted a revised version of that standard, which was written by a reconstitution of that task force, which has now been disbanded with our thanks. Similarly, many of our editorial functions are somewhat in disorder and need a careful review. So we appointed a committee called the Editorial Advisory Committee, which acted as a task force. It was disbanded with our thanks very

recently, having done a wonderful job on such things as a glossary, how we organize and word our standards, and many other things.

Currently, we still have a Retiree Group Benefits Task Force, which is looking at the valuation of retiree group benefits and the application of *FAS 106*. Presumably its members are going to write a standard that will cover those matters.

Each of our committees can also appoint a task force. As a matter of fact, it's normal for one of our standing committees to appoint a task force any time it has to write a standard, which is sometimes known as a drafting committee. Currently, the Life Committee has two task forces in operation, both of which have to do with the demutualization question. I hope Ken will talk about that.

Our Casualty Committee has two standing subcommittees of long duration. One of them is a rate-making committee, which has turned out a series of standards on how rates are made in casualty. And the reserving committee has the task of setting standards for casualty reserves, particularly claim reserves. It also has a more temporary committee called the Complex Models Task Force, and I'm going to talk a little bit more about that in a moment, because I think the Complex Models Task Force is an interesting example of current work.

The Pension Committee has a task force, which is still in operation, on the QDRO standard. If you're not a pension actuary, you probably don't know what a QDRO is. It's a qualified domestic relations order. It has to do with just one thing—how to split up the pension when people get divorced. It's been a subject of great controversy. A standard is being written, and I believe it's being re-exposed at the present time, having been exposed once and receiving a lot of comment.

I want to talk about the complex model standard. Although it started out as purely a casualty standard (and I realize that I'm talking to a group that tends to be interested in life insurance), the idea that it should be purely a casualty standard is being reconsidered at the present time. I realize that if we eventually decide to limit it to casualty, then it will become less important to life actuaries. That decision has not actually been made yet. I think the most recent position of the Complex Models Task Force was that it should be limited merely to casualty. When it was first exposed last summer, it was written to apply to all practice areas, and it is my impression that life actuaries in general were not alert to the implications of the standard, even though it was exposed to all members of the AAA.

In some ways, I feel that members of the board, myself in particular, didn't do enough to alert life actuaries that this was out there. It had important implications for what they do. It would impose some very detailed procedures on actuaries that

use nonactuarial models in their actuarial work. According to that proposed standard, if actuaries are to rely on the people who build the model, then the actuaries should determine several things. First, they should determine whether those people are expert in their fields, whether the model has been widely reviewed, whether it meets professional standards in its own field, or whether there are material differences of opinion about the model in that field.

The user actuary should, in addition, have a basic understanding of the model, know the basic components and understand them, understand the user input that's needed for the model, and determine the appropriateness of the model for the particular use that the actuary is going to put it to. Actuaries should evaluate the historical data that went into the model and the effective changes in the field from which the model originated, as well as whether, in that field of endeavor, there are recent changes in the way things are done that might affect the validity of the model. In addition, the actuaries should validate model output in terms of intended use, possible alternatives, historical comparisons, consistency of output, and sensitivity to assumption changes. Then all of these procedures should be documented.

I've just listed a really tough standard. If it's going to apply in the life field, it could have major implications. When the exposure draft spoke in terms of nonactuarial models, what the people who created the draft had in mind were the hurricane and earthquake models that are becoming very popular and very useful in the casualty field. These models were created by physicists, meteorologists, and engineers. They are generally proprietary, so it's difficult to know what went into the model. It's a big problem for the casualty people when they go to a state and say, "Here's our rate for homeowners insurance in south Florida, and they tell us this is the hurricane probability." Or in California they tell us, "This is the earthquake probability and likelihood of loss. I just don't know where that came from, but I want you to accept my rates." That's difficult for the state to do, so a standard has been developed with that in mind.

But, if this standard does become applicable to life actuaries, then it could apply to things like mortgage prepayment models, which are frequently done by people who are not actuaries. Then a much higher standard of behavior will be enforced upon life actuaries than is now the case. I suspect that many life actuaries have been using models, such as mortgage prepayment models, for many years without looking too deeply at them.

If this standard comes into effect, they would have to do a lot more validation and documentation when using such models. Incidentally, the whole idea of a nonactuarial model has come under fire and we are currently changing this to cover

all models outside the actuary's area of expertise. Keep your eyes open. I don't know what form this will take. It was exposed once and came back with so many comments that it had to be re-exposed. You'll get it in the mail if you're a member of the Academy or a member of several other groups that are on the mailing list.

Look at Section 1.1 of the standard, which is titled Scope, and see if it applies to your work. If it does, read it carefully, because it could have a very important effect on your work. For example, *Standard No. 22*, which governs asset adequacy in life insurance, allows the actuary to claim reliance on an analysis supplied by others, provided that the reliance is disclosed and provided that the actuary is "satisfied then that the analysis is reasonable."

One of my first experiences in ASB work was on one of those committees that drafted *Standard No. 22* starting in 1992. I went back and read it now and I said to myself, after having gone through the fires of the succeeding years, that reliance paragraph in *Standard No. 22* just isn't up to modern standards and should be changed.

I don't know if any of you attended Atlanta Session 41PD "Resolving Conflicting Demands on the Valuation Actuary" where Larry Gorski led a little drama about the valuation actuary. He had a situation where the actuary had a real problem deciding whether the data that was given by the investment department and the marketing department was "reasonable." The actuary had very little backup from the actuarial standards to support any kind of negative finding that would require him to set up additional reserves.

I hope we can strengthen standards of this type and, as with all standards, keep your eyes open. They have more implications than you might think. It could have an effect on your work and cause a major change in how you operate. I would hate to see something that does have such an effect appear and be promulgated without input from the profession, and that's what happened the last time around. We didn't get much input from life actuaries. They didn't really realize the complex models standard applied to them. It may not. If it doesn't, then I think we'll go on some day and write a standard for life actuaries on how they use models done by other people, because more and more we are using models done by other people.

Mr. Kenneth W. Hartwell: I will be discussing two general topics: the operation of the Life Committee, including how it approaches drafting a standard and the review and exposure process for a proposed standard of practice. First, I'll discuss the Life Committee and how it operates. As Frank said, the Life Committee is one of the five operating committees of the ASB and is responsible to the ASB for all current or proposed Actuarial Standards of Practice (ASOPs) that relate to life insurance. The

other four operating committees handle casualty, health, pension, or general matters. It's the General Committee, for which I am the principal liaison, that drafts standards that apply to all practice areas.

The current standards for which the Life Committee is responsible include:

- ASOP 1, which deals with nonguaranteed elements
- ASOP 7, performing cash-flow testing
- ASOP 10, which deals with stock life insurance companies' financial assessments
- ASOP 11, treatment of reinsurance
- ASOP 14, when to do cash-flow testing
- ASOP 15, dividend determination and illustration for participating individual life and annuity contracts
- ASOP 19, actuarial appraisals
- ASOP 21, the actuary's responsibility to the auditor (In this case, it should be noted that this ASOP also covers property/casualty companies, Blue Cross/Blue Shield organizations, and various others.)
- ASOP 22, which covers statements of opinion based on asset adequacy analysis by appointed actuaries
- ASOP 24, compliance with the NAIC life insurance illustrations model regulation
- ASOP 33, actuarial responsibilities with respect to closed blocks in mutual life insurance company conversions (adopted in January 1999)
- Actuarial Compliance Guideline No. 4, the so-called Section 7 opinion, which has no asset adequacy analysis.

Each ASB member has been assigned a term of three years or less and, as a member's term expires, the member may be asked to serve another term or be replaced. This allows the chair to have some turnover and diversity of thought, and to manage the number of individuals that roll off the committee each year.

We strive to include members in the Life Committee who come from mutual companies, stock companies, and consulting firms. If we have an abundance of people applying to the Life Committee, then we look to assure that we have pricing, reserving, and other disciplines covered. This diversity allows us to have committee members who have appropriate experience.

The committee meets about three to five times a year, and the meetings are open to the public. However, commentary from nonmembers during a committee meeting is limited, based on the priority given to committee members to express their thoughts and the time allotted by the chair to each topic on the agenda.

The meetings of the Life Committee are attended by its assigned liaison on the ASB and by an ASB staff member to help with administrative work. The liaison to the Life Committee is Bill Koenig; Frank Irish is Bill's backup. On each of these committees, we have a primary liaison and a backup. My secondary liaison job is casualty, and it has been an interesting experience for me to learn all sorts of things about casualty work that I didn't know before.

Each year the Life Committee is responsible for performing a review of the various ASOPs and actuarial compliance guidelines to determine if the ASOPs are in need of revision. New assignments are usually initiated by the Life Committee, but may also come from the ASB. At the start of an assignment, the Life Committee tends to create a task force. Not all the committees operate this way, but the Life Committee does. The members and the chair of the task force may or may not be Life Committee members, and the Life Committee actually utilizes any qualified individual that will augment the experience and availability of the people who are on the Life Committee. Most times, the chair of the task force reports to the Life Committee chair, and the Life Committee chair then has to inform the rest of the Life Committee as to what the task force is recommending as it proceeds with its work. The Life Committee has sole responsibility to determine how to proceed with the recommendation and eventually take it to the ASB.

Once the task force has been appointed, it studies the assignment and usually prepares a one-page proposal for a new standard or revision to an existing standard. This particular document is at a high level and discusses the need for the project, the urgency of the project, and the specific issues that will be addressed. This proposal is reviewed and approved by the Life Committee and then forwarded to the ASB for approval. While this is all going on, the task force is diligently working on drafting the assigned ASOP. Shortly thereafter, the task force prepares a summary of the standard under development, and this summary goes through the same process as the proposal that I just mentioned. This second type of form provides a lot more detail, such as the scope of the standard, a proposed timetable for exposure and adoption, and any questions that should be directed to the ASB.

The main work in preparing an exposure draft for an ASOP is related to understanding the nature of the standard, gathering expert information, and formulating the standard. Many revisions are produced, and the focus in the beginning is on the overall organization and presentation of the material. As the draft standard nears completion, the focus shifts to a more detailed discussion of the meaning of each word or sentence, and whether that word or sentence is in the proper context. Because actuaries will be using the standard for many years, the words used are, in fact, very important. Each task force member has a vote in

preparing a new, or revising an existing, standard. The task force is expected to provide the Life Committee with a work product and its vote or opinion relative to that product. To digress for a moment—when we in the ASB get these reports, we place quite a lot of reliance on whether the task force was unanimous or the committee was unanimous in forwarding its recommendations. Occasionally, there might be close to a 50/50 split, and that could spell trouble.

Now let's look at the current assignments of the Life Committee. The monthly ASB box score has information about current ASOPs under development in all the practice areas, and it has some limited information about the timing and the nature of each project. This information is updated once the ASB has approved a proposal for a new standard or a revision of an existing standard. For example, *ASOP1* may be revised to reflect comparable changes that were made to *ASOP15*. ASOP10 may be revised to reflect FASB pronouncements that were made since the standard was published or adopted. *ASOP 7*, *14*, *22*, and *Actuarial Compliance Guideline 4* may all be revised based on discussions with the NAIC, and I'll go into that later.

Policyholder equity is a proposed new standard related to demutualizations and the way actuarial consideration is divided among eligible policyholders. We approved the exposure draft at the April meeting of the ASB, and it should be going out in June 1999. As I mentioned earlier, in January 1999, the ASB adopted the new closed block *ASOP*, *No. 33*.

Finally, XXX, is getting a lot of attention at this SOA meeting in one way or another. This potential new standard would cover the required actuarial opinion under the NAIC's valuation of life insurance policies model regulation, which provides that the appointed actuary shall opine on the mortality rates used in the valuation. At this juncture, a proposal for a new standard is to be submitted to the ASB for this project.

We have created a list of industry topics that are being monitored and where a standard may ultimately be needed. The first one is annuity sales illustrations and variable life sales illustrations, then nonforfeiture, the unified valuation system (UVS), and finally, dynamic solvency testing.

The Life Committee had been conducting a general review of existing ASOPs and felt that there may be a need to upgrade the cash-flow testing standards to reflect current practice. At the time of this review, the NAIC was working on the synthetic guaranteed investment contract model regulation and the separate account funding guaranteed minimum benefits under the group contract model regulation. The NAIC was also considering whether equity-indexed insurance products should be subject to asset-adequacy testing. These model regulations provide for an actuarial

opinion based on asset-adequacy testing and probably would require new standards of practice.

At this point, the future direction of asset-adequacy ASOPs was discussed. Should a separate standard be produced for each new model regulation that comes up and requires asset-adequacy testing? Or should the existing standards be expanded to cover these new regulations? The Life Committee decided that one way to gain insight to answer these questions was to solicit the opinion of the NAIC and the ASB. To provide support in this effort, a task force was created and initially staffed with four individuals, three of whom were from the Life Committee and the fourth of whom was a consultant.

As chair of the Life Committee, Lew Nathan participated in a conference call with the NAIC Life and Health Actuarial Task Force (LHATF) that related to the Actuarial Opinion and Memorandum Regulation (AOMR). As we are providing guidance to actuaries complying with model or state regulations, it is important that we work with the NAIC to assure that these standards properly reflect actuarial principles, but also are consistent with any mandates or rules reflected in the model regulations.

In the conference call with the NAIC's task force, we mentioned our assignment and asked for guidance. In general, the approach of having a single set of standards for asset-adequacy testing was favored, rather than having a separate standard for each model regulation. The existing set of ASOPs would be rewritten to place more emphasis on actuarial principles and would encompass these new model regulations. The LHATF would consider a revision to the existing AOMR model regulation in order to place more reliance on these revised ASOPs, with the intention of potentially reducing the detail currently present in the model regulation itself, while still achieving the same degree of compliance.

In particular, the so-called small-company, Section 7 opinion may be removed from the AOMR regulation. It should be noted that the other model regulations, such as the synthetic GICs, do not have the equivalent of a Section 7 opinion. To be responsive to the concerns of all companies, relative to the costs of asset-adequacy testing, the Life Committee will be considering all appropriate alternatives to full cash-flow testing, with an emphasis on limited testing for limited-risk products.

After all these discussions, the Life Committee prepared a revision to the existing standard and presented the concept to the ASB in January 1999. The ASB approved this general approach. The LHATF of the NAIC was informed of the ASB decision and requested that the Life Committee's task force move ahead to produce a proposed new set of standards. I hope that this example illustrates several different aspects of the Life Committee work.

To summarize the example we have been discussing, the Life Committee and the ASB need to establish ASOPs that are relevant, based on actuarial principles, and consistent with industry regulation. Second, they must look to the future to ensure that ASOPs are organized and written in a consistent and efficient manner. Third, the Life Committee must work closely with the NAIC to coordinate our efforts and support the NAIC.

The final portion of my talk deals with the review and exposure process. Once an exposure draft for an ASOP has been prepared, the Life Committee reviews it in detail. The Life Committee may make changes to ensure that the standard communicates effectively, that the information in the standard is on point, and that the material is in the proper format.

Once the Life Committee approves the draft, it's sent to the ASB for review and approval as an exposure draft to the membership. The ASB discussion covers the overall content and organization of the draft, as well as the construction of each sentence, and frequently includes debates about a particular word or phrase. The chair of the appropriate operating committee is usually present, as well as one or more of the task force members who had been responsible for drafting that particular standard from the beginning.

Sometimes the ASB returns the draft to the operating committee for more study, but usually it approves the draft, invariably with some changes of its own, for exposure and comment by the membership. The ASB appoints a small review committee for each exposure draft and for each final ASOP that it adopts. This review committee is usually composed of two ASB members, with someone from the operating committee or the task force or both, and its purpose is to ensure that the decisions taken by the ASB at the board meeting are actually implemented by the staff.

A draft ASOP that's been approved by the ASB for exposure is sent to the members of all actuarial organizations governed by ASOPs promulgated by the ASB for review and comment by a specified date. All comments received are forwarded to the members of the responsible task force and to the chair of the operating committee. Each comment is reviewed and discussed by the task force, and changes are often made to the exposure draft based on the comments received. In addition, an appendix is added to the document that discusses the general context of the comments received and gives the response of the operating committee to each significant comment. It's not unusual for us to receive 25 or 30 well-presented comments on a particular standard, and this whole approach is a vital part of involving the membership in what's going on. We do take all comments seriously, not only in the operating committee, but also in the ASB.

The next step is for the Life Committee to review and approve the revised exposure draft and send it to the ASB. If the changes that the Life Committee has made are viewed as not fundamentally altering the scope or applicability of the standard, then the ASB is likely to adopt the revised draft as a final ASOP. Otherwise, a second exposure draft is sent to the membership for comment. Most proposed standards need only one exposure draft, but if the ASB (often after taking advice from its legal counsel) considers that the changes made as a result of the first exposure constitute any kind of raising of the bar, then it will decide to re-expose. Although re-exposure requires another long period of time, it is very important to take the time in the entire process underlying the ASOPs.

Mr. Irish: There are some developments in other committees that I think would be of interest to you, in particular, the work of the General Committee under the chairmanship of Bob Stein, which is preparing some standards that cut equally across all practice areas. Two such standards were up for exposure recently and comments are being reviewed for the redrafting of those standards.

One was on actuarial communications, and the exposure draft spells out the responsibility of an actuary when making a written communication, including wording the report appropriately for the direct user's knowledge and disclosing the following: lack of independence, reliance, and use of methods or functions that have been prescribed by the user, and any obligations imposed by law. In addition, if the communication is a formal presentation of findings, there must be sufficient clarity so that another actuary can judge the reasonableness of the findings. The standard would emphasize the interest of direct users, which are typically clients or employers, and only require that there be reasonable care not to mislead indirect users. I should point out that this standard at this point does not apply to all communications, but only to written ones. Incidentally, the question of direct and indirect users is a long-standing question, but at this point we've decided to focus on direct users.

I remember when the Social Security standard was adopted and the interest of indirect users became very important. This is certainly one area where the public listens to actuaries because the public believes they are professionals. There are particular standards, and I believe this is true for Social Security standards, that may contain more for citizens than this general standard, but this one applies to all actuarial work.

A related subject is the work of the Academy's Professionalism Committee on the subject of prescribed statements of actuarial opinion. The Professionalism Committee is not part of the ASB, but this aspect of its work is very closely related to what we do. You should be interested in reading this new version of the

qualification standards that was promulgated in final form recently. It establishes a new category of actuarial communication, the prescribed statement of actuarial opinion (PSAO). The boundaries of this new category are complicated, but can be summarized as follows. When a communication contains any statement that is issued for the purpose of compliance with a law or regulation, compliance with an actuarial standard of practice, or compliance with a standard of FASB or any other one of several accounting organizations, then it becomes a PSAO. I repeat, this is not an ASB standard; it's a Professionalism Committee standard, but it relates closely to our work. It contains a lengthy appendix, which I suggest you read, discussing various kinds of actuarial communications and how one can tell whether they are PSAOs.

The relationship of the PSAO question to Actuarial Standards of Practices is a complex one. In many cases, an actuarial communication, which may be governed by the provisions of an actuarial standard, but is not specifically issued for purposes of compliance with our standard, is probably not a PSAO. For example, during the pricing process, actuaries tend to produce a number of authoritative documents, reports on experience, proposals for product design, and so forth. These don't seem to be PSAOs and, therefore, are not subject to the qualification standard. When the actuary advises the company on nonguaranteed elements, for example, or recommends a dividend scale or the scales to be used in sales illustrations, then it does seem to be a PSAO.

The significance of writing a PSAO, and knowing that what you're writing is a PSAO, is in knowing that the actuary who writes one must be qualified to do so. This means not only education and experience requirements, but also continuing education of 12 hours per year in the practice area. It seems to me that these requirements are very mild, and almost anybody who goes to a Society meeting is probably meeting the requirements of 12 hours per year, and has the background education and experience.

There are also some particular kinds of actuarial communications that are subject to more rigorous qualification standards. Those are the signing of a statement of actuarial opinion for the NAIC and similarly, I believe the signing of the casualty reserve opinion requires more rigorous qualification standards.

Another problem is that, right now, the definition of what is and is not a PSAO is not always clear, and actuaries are going to have to use their judgment as to whether they're writing a PSAO. Often the question is a matter of intent. That is, the documents must be issued for the purpose of compliance with an actuarial standard. To help the situation, the ASB is going through its standards now and gradually putting in wording that would tell the actuary that particular things are

required or having to do with the standard are not PSAOs. For example, the recent revision of the long-term-care standard specifically provides that nothing that's done in compliance with that standard requires a PSAO. On the other hand, the recent standard on closed blocks and demutualization specifies particular documentation, says that it is a PSAO, and should only be signed by an actuary who meets the general qualification standards.

The other standard that originated from the General Committee is on Generally Accepted Actuarial Principles. It's fairly brief and instructs the actuary that Actuarial Standards of Practice have to be considered the most authoritative source of practice that is available in actuarial work, but that the actuary is also an important source of knowledge about what is accepted practice.

Throughout the standards of practice, we make it clear that these are recommendations for what is acceptable. These are not regulations. In all cases, we try to use the word "should" instead of the word "must" when we write standards. Don't forget that, when a court challenge arises with regard to an actuary's work, or when the Actuarial Board for Counseling and Discipline is considering disciplinary action, one of the key determinants will be whether the actions of the actuary conform to the standards.

So we try to write those standards to be as useful and effective as possible. We need the profession to make informed comments on the exposure drafts, as Ken said. This is not a matter of voting, but of eliciting comments that are convincing and give us insight on how to define the acceptable. If we do this right, we will achieve the goals that I set out earlier. We will earn and deserve the public trust. Employers, clients, regulators, and the general public will trust us to maintain a high ethical level and a high standard of competence.

Mr. Gutterman: Regarding the complex models standard, I submitted some comments on the important issue of reliance. This is one that I am particularly concerned with because of its common use. The complex model is a subcategory or type of reliance. It may be appropriate for the ASB to consider a separate standard on this issue.

Mr. Irish: There was an unfortunate incident within our ranks, unfortunate in the sense that it led to a little delay and misunderstanding. When the complex model standard was reviewed by the board, the scope was made very broad, applying to all practice areas and applying to a large number of different models. The board also made that complex model standard superior to all other standards. It said that this standard is the standard that applies, which was an easy way of raising the bar on the use of models by all actuaries. Well, it was a little too easy. The question of reliance and the use of models that have been constructed by other people is more

complicated than just saying we all should do the same things as casualty actuaries who use earthquake models. I've thought about it and it just isn't that simple. You're right, Sam. An important point to recognize, however, is that many of the standards that are now in existence have something to say about reliance. They all say something slightly different. Speaking for myself, I can only say that I'm waking up to the fact that it's become an important subject, and we do need to address it.

Mr. Gutterman: Reliance is often placed on the accuracy of the underlying data that are used. I often rely on the accuracy of the data that are provided to me in my actuarial work. I continue to wrestle with this issue—how much I can or should rely on available data.

Mr. Irish: You're quite right, but let me point out one thing. We do make a distinction between reliance on data and reliance on models. Obviously they're closely related, but they are two different things. We do have a standard on data, it's *ASOP No. 23*, and I think that's a pretty good standard. We could always tighten up *ASOP No. 23*, but given its number, I would judge that it's only about four or five years old. Many of the other standards that talk about reliance on models are much older. I think models are one area that we do have to be concerned about right now.

Mr. Gutterman: I would like to close with one comment. Standards are quite important to actuaries and their profession, and it is not a one-time concern or issue. It is not something that you look at when a standard is proposed or when it's adopted. It's something that you have to refresh your memory with periodically. It's very important to remember what standards are and what they are not. They are not intended to be a cookbook. They are important to think about (and possibly review) before undertaking any assignment, if you're a consultant.

If you're an employee of a company, it's also relevant when you're providing an opinion or starting a project. You have to think about what standards of practice may affect your task. It may be no more than just looking at the title of the existing standards and identifying whether there is something that you should be concerned with and refreshing your memory to determine, for example, whether you are qualified to conduct a project. It is very important to produce a quality professional product, in addition to avoiding disciplinary action. I hope that the latter will never affect you, however, it's important that actuaries continue to focus on their qualifications to do a particular project and on the quality of the work they ultimately produce.