Episode 8: Validating the Scenarios

In episode 8 of the Everything GOES podcast, Daniel Finn and Bill Pauling discuss the validation process.

SEGMENT 1—OPENING

[Joe Golaszewski] Hi, and welcome to the Everything GOES podcast, where we discuss the NAIC's upcoming transition from the Academy Interest Rate Generator scenarios to the new GOES scenarios. I'm your host, Joe Golaszewski, and I'm joined today by Daniel Finn and Bill Pauling, who are both part of Conning's Risk Solutions unit. Today's episode will be about the process that Conning uses to validate the GOES scenarios—in other words, what sort of tests Conning undertakes to ensure that the scenarios are reasonable and lie within the expected bounds. Dan, can you start us off and give us an overview?

SEGMENT 2—VALIDATION OVERVIEW (0:52)

[Dan Finn] Sure. I think it's important to note that before we even start talking about generating the scenarios, we actually have a process that starts with our software. So Conning's GEMS, which is the underlying platform we're using here, has a global user base. We've got over eighty different companies around the globe using this software and different tiers of it. So, that means we often have to make updates to the software, typically some sort of patch to maybe fix something in terms of how it works with Office or some local component or something in the model that's not working quite properly. So that leads to updates about every two to three weeks on a a small basis. In order to make sure that companies can use those new versions, Conning is constantly testing these. Particularly for the NAIC scenarios, part of our testing is to ensure that those new versions are producing the exact same results with the right settings as what we call the "golden version." So, all of our runs are using the same version, and we'll talk in our next episode a little bit about when and if that updates, because that's part of the governance process, but we're not moving forward on our model. But we do want to make sure that if companies need to use that or want to use that new functionality, they're able to get the same results. We also have to do the same things across multiple platforms. We now are offering the API, which we've talked about in past podcasts, that allows companies to bring these scenarios into their cash-flow modeling systems. So those versions come along with the software as well, and we need to test, that those are producing the same scenarios as well and all are matching what we've agreed on in terms of the different characteristics with the NAIC. And then obviously we're going to validate the entire process, but I think it's important to sort of ground ourselves, in that we've really got this strong base, and understand that the scenarios being generated by both us and our clients are going to be the same and meet the NAIC's guidelines.

[JG] Right. So it sounds like Conning's doing quite a bit of testing to ensure that the scenarios will be accurate, both the ones that they publish and also those that the users of the GEMS software produce for themselves. But what about on a monthly basis? What sort of tests is Conning performing to ensure That each month's scenarios align with the NAIC's guidelines?

[Bill Pauling] As part of our process, Conning has a checklist that we send to the NAIC. Right now, that has a little over a dozen items on it, including things like, did we use the right version? Do the initial treasury yields match the yields published on the Treasury website? Are the files complete? And does the software and API produce the same results? We also perform some tests based on the specific nature of the NAIC setup. So, for example, in the stochastic exclusion ratio test, the SERT scenarios, we know that both scenario #1 and scenario #2 are the pop-up scenarios for Treasury, so we check to make sure that those two scenarios have the same Treasury yields throughout the projected 1,200 months.

[DF] Yeah. And I think it's also worth mentioning that this sign-off procedure is separate from the scenario generation. Right now I'm the one signing off on all of the items Bill just mentioned. So, every month I send to the NAIC an attestation that says we've met all those agreed-upon targets. But the scenarios are actually being generated by two other team members here on the Risk Solutions side, Tarek Ammouri and Kegan McGloin. We feel that having that separation gives us an additional layer of comfort that the scenarios are being properly vetted.

[JG] Right. That makes sense, given how important these scenarios are to the industry. So what's the next step? What happens to the scenarios once Conning has okayed them?

SEGMENT 3—RELEASE PROCESS (5:10)

[DF] So, on a typical month, our process ends about 10:00 AM on that first business day. So we've been running this, we got the data the previous night, we did the calibration, we submitted it, we processed it, so we can get all the data and the validation reports. At that point we send a notification to the NAIC so that they can go and look at it before we've made that data public. They have their own independent review; most of the review that they're doing is focused on the calibration targets. So, how's it doing on a low-for-long? What's the mean reversion level of interest rates? They do some of the same tests—we have incorporated things into our process that they had in order to sort of pretest those—but they still do a number of those on their own. And all of that at the end is going to lead to that Additional Statistics file. So if you've gone to the website each month, you'll notice that there's a validation report. That's Conning's output review, or part of our output review, and then there's an Excel file labeled as Additional Statistics. That one is coming from the NAIC. So they produce their file, they send it back to us and let us know that they're they're satisfied with the results.

[JG] So once both Conning and the NAIC are satisfied, we finally release the scenarios?

[BP] Almost. Once we get the go-ahead from the NAIC, we'll post the files to the website, but then we'll do some download testing, especially for the big data set, to make sure that all the links are working properly. Only once we're comfortable with that does NAIC send out the notification that the scenario files are ready.

[JG] OK. Well, that definitely sounds like we're taking a lot of precautions here. Has this process caught any issues so far?

[DF] Well, fortunately there haven't been a ton of issues since we've been running this process for about a year now. We started our first live run off December 2024—we started quarterly and then we've been doing monthly since September—but there have been a couple. Bill mentioned that we test that the files can actually be downloaded. Early on in the process, we found out that the way we produce the hyperlinks don't get properly parsed if there are spaces in the underlying file names. So we could post it, it looks like it works for us, but then when people were going to download they got an error. So that's the sort of thing that that we've fixed. Now we actually build that into our process and we make sure that any spaces are replaced with underscores, but we still want to have that test. You know, there are possibilities, there are other characters that won't work in a hyperlink. So it is possible that we could create a file name that won't be able to to be downloaded and that's sort of why we've built that last step that Bill mentioned, the download testing for all these files, into our process.

[BP] Right. Going forward, we've also created a GOES Model Governance section on the Documentation tab of the website, and that's to track any issues that may arise. So, if there is an issue, we'll first work with the NAIC to rectify it. Once that's taken care of, we'll work with them to put together a document that describes the nature of the problem and how it was resolved. Right now, if you go out to the website, you'll see there are two documents out there in that section. The first one is 26001, and that one covers an issue that Conning had with the November 2025 SERT scenarios. The second document, 26002, describes an issue with the International Diversified Equity returns in the NAIC's summary file.

[DF] Yeah, and I think it's worth mentioning that we fully expect this process to evolve. For example, some of the tests that we're now performing on the SERT scenarios are specifically designed to identify issues like the ones outlined in that 26001 notice that Bill mentioned.

SEGMENT 4—CLOSING (9:52)

[JG] Good to know. Well, I think that covers our topic, so thanks to both Dan and Bill for giving us that overview of the validation process. As always, if our listeners have any questions, please send us an e-mail at naicscenarios@conning.com. Now, if anyone is wondering what happens when changes need to be made to these calibrations or any other significant aspect of the GOES model, be sure to tune in to our next episode, where we'll be discussing GOES model governance. Until then, thanks for listening and keep on modeling!

About Conning

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