It seems to be an undeniable part of human nature. When we consider making changes – whether it has to do with the place where we live, the business we are in, or the partner we choose – we tend to compare the flaws of the thing we know to the ideal version of the new thing we are considering. We even have shorthand for pointing that out: "The grass is always greener on the other side of the fence." This isn't necessarily a bad trait. Without it, would people be as likely to invest in new businesses, explore new places, or make new friends?

But sometimes, this tendency to ignore or discount the possible flaws of something new can expose people to otherwise avoidable problems. When Michael Lewis wrote about the antecedents to the worldwide financial crisis of 2008 in a book called The Big Short, he described the process that Standard and Poor's used to assess the merits of investment in subprime mortgages. Reportedly, its computer model had no capability to insert a negative number. The analysis rested entirely on the assumption that housing values would always go up. Apparently, the analysts weren't considering what would happen if housing values went down. We are still digging out from the rubble caused by that omission.

On the flip side, California may never fully recover from a failure to consider the possibility that costs could go up. The context, there, was the state's electricity deregulation process. The policy leaders who devised the new markets back in the 1990s certainly did not want to hear a discouraging word. In fact, they ordered the California Public Utilities Commission analysts who were creating the framework to avoid talking about it with anyone on the staff who might say anything critical. The entire program rested on the assumption that competition in electricity markets would bring down the cost of power. On that basis, policy makers were willing to make utilities rely exclusively on power traded in day-ahead and hour-ahead auction markets. Why lock in high costs through long-term contracts when prices were so clearly going to go down? Hardly anyone was willing to raise a voice to ask what should have been an obvious question: "What if prices go up?" The result was a $40 billion hit to the California economy when power prices in 2000-2001 gyrated wildly between the typical $25 per megawatt hour and amounts in excess of $1,000 per megawatt hour.

These lessons come to mind as the State of New York considers the next phase of electric utility reinvention. New York regulators say that the nature of electric service is inevitably changing and that the utilities are too interested in protecting the status quo to be of much help. Climate concerns underscore the need to make the grid much more efficient and intelligent than it is today. Lower-cost rooftop solar, fuel cells, and micro-turbines make it possible to avoid the line losses and environmental impacts related to large, distant power plants and long transmission lines. Rebates and advertising programs are not going to give us the deep energy efficiency improvements that we so badly need. The solutions? Open up the distribution grid to competition. Change the utilities' incentive structure to make the companies interested in encouraging self-generation and innovation. Increase customer choice so that customers will be free to make good choices. Rely more on microgrids and distributed generation to improve system security and resilience.

All of these proposals may be just what we need, and the rest of the nation is watching the process with great interest. Looking at the language in the New York Public Service Commission's decision approving this new industry structure, there is hope that the Commission understands the danger of over-confidence. Although the decision does contain some bold predictions — intelligent infrastructure investment "will" improve reliability, cost and resiliency –, it is also filled with words such as "can," "may", and "intent" – the development of new markets "can" improve access to universal service.

As Wall Street and California know, the devil is in the details. As New York moves from big concepts to things like technical specifications and tariff changes, here is hoping the regulators will match their desire to succeed with a zeal to uncover any dangers or unacceptable risks that might lurk beneath the surface. Just as an automaker might conduct test crashes to see how its vehicle falls apart and a drug maker undertakes clinical studies to discover side effects, New York regulators could designate their best and brightest analysts to crash-test the various proposed changes. They could reward the experts who do the best job of uncovering opportunities for market manipulation, pointing out unproven assumptions, and exposing perverse incentives. They can encourage their experts to constantly remind them that a cash reward tied to good behavior first motivates someone to get the cash. Actually adopting the good behavior is less important.

The purpose of encouraging skeptical analysis is not to defeat the reforms, but to provide a better opportunity to have them achieve the stated goals. If the regulators don't find the problems early and shape the rules to overcome them, the market might find the problems for them – as it did on Wall Street and in California.