



# The Final Clean Power Plan Rule: *Four Implications Point to Harder Choices, Bigger Upside to Getting It Right*

By Chris MacCracken and Matt Robison

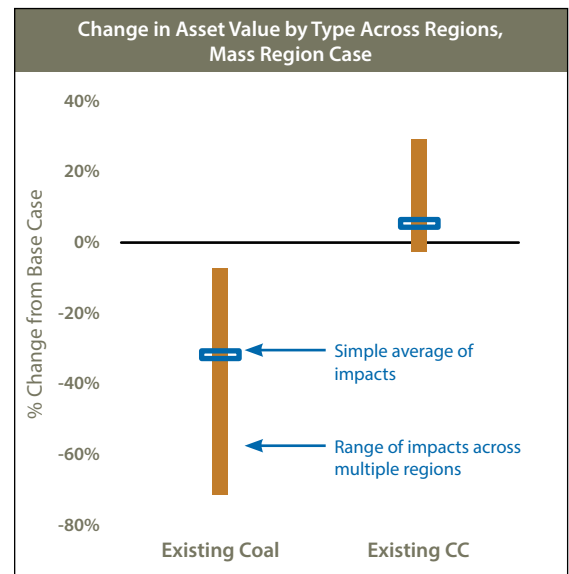


In the final Clean Power Plan (CPP) rule, EPA maintained the compliance flexibility of the proposed rule, but added new requirements and more decision points. These changes will have significant implications for—and thus demand more thought from—utilities, investors, and other stakeholders.

**Bigger Range of Asset Value Impacts.** While there are too many permutations to compare every scenario in every state, we think this is very likely. In ICF’s October, 2015 webinar *Clean Power Plan: Implications for Power Prices and Asset Values*, we showed how one set of choices around the new, broader set of decision points can impact generator value. The magnitude of change for some coal units is greater than what we found in our analysis of the proposed rule earlier this year.<sup>1</sup> What was a negligible decline in asset value under the proposed rule for our units of focus has become a 20 percent decline under the final rule provisions. This effect may not hold in every scenario, but impacts on asset values are likely of greater magnitude in many cases.

### And More Landing Points Within That Range...

In the case depicted above, coal unit values declined across all regions relative to a future without the CPP, while existing natural gas combined cycle (CC) values gained in nearly every area. But the potential impacts on value span the entire range, from less than a 10 percent decline to more than 70 percent. The gas units realized a narrower—but still substantial, and mostly positive—range of value changes, with more possibilities within that range.



**...Because There Are Now Many More Choices Branching Off the Main Paths.** Once comparatively straightforward pathways under the proposed CPP rule now contain branches leading to very different outcomes from an asset-owner perspective. The critical plan design choices remain—rate (lb/MWh) standard versus a mass (tonnage) standard and moving forward alone as a state for compliance or joining with other states. However, EPA has now introduced “flavors” of each type of standard. States adopting a mass standard, for example, must now address “leakage” through one of three specified approaches. Similarly, the rate standard path also requires that a state decide among three subsidiary approaches, in part linked to the readiness to join a trading program.

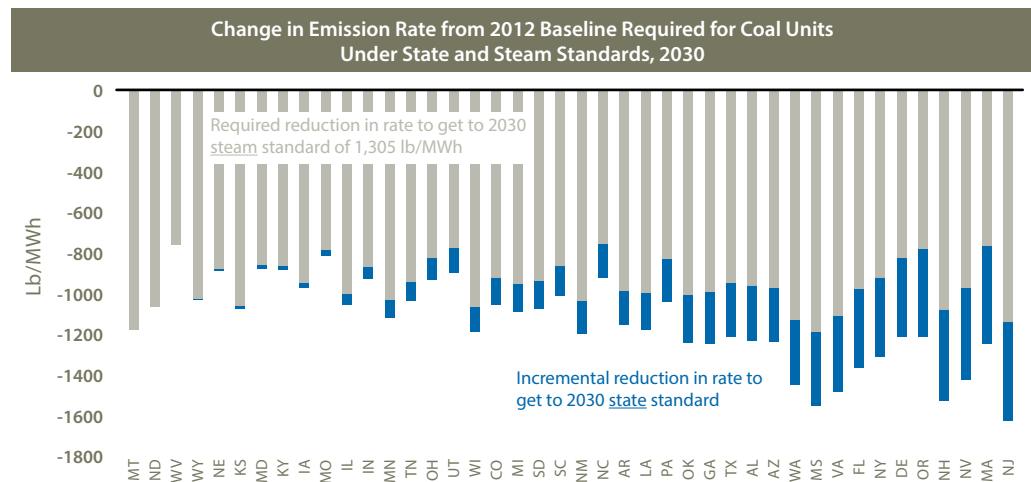
**The New Components of Plan Design Are Actually Now Just As Important as the Overall Design Choice.** The exact combination of this broader set of possible plan components selected by a state—as well as the plans chosen by other states—will determine the ultimate outcomes for affected source compliance costs, wholesale and retail power prices, and opportunities for new investment. For example, as shown below, the choice of a category-specific rate standard to access credits from other

<sup>1</sup> See ICF’s February, 2015 paper *Clean Power Plan: Bigger Risks, More Opportunities Than You Think*.



states (grey bars) over a single state standard (blue bars) will result in a lower rate reduction burden for some coal steam units. In ICF's recent analysis, that choice results in 25 percent fewer megawatts of coal retirements in one eastern state. However, existing combined cycle units in that state under that type of standard end up short credits rather than long, leading to a loss of credit sales and a 10 percent decline in their energy revenue. A different state realizes an even greater 15 percent decline in combined cycle unit energy revenue but the opposite impact with respect to coal retirements—25 percent higher coal retirements. The bottom line: the final rule sets up a far more dynamic picture with different stakeholders (and different elements of a utility portfolio) having a different position on plan choices depending on flavors chosen and the pathways that neighbors take.

### Choice of Rate Standard Design Drives Burden on Steam Units



### A Few Takeaways for Navigating The New Landscape

- Clearly, the added complexity makes strategic decisions harder, but it also presents opportunity: a bigger range of asset value and fuel price outcomes is a threat, but more outcomes within that range gives a greater chance to realize upside potential and mitigate costs. For example, if you are a utility with a clear preference for a rate standard, and the state instead leans toward a mass cap, you may still advocate for the right flavor of mass cap and find opportunity under that different type of standard. If you are subject to competing pressures on which path to advocate, you now have more options for finding compromise. There are more acceptable answers.
- In that regard, knowledge is power. Companies will want to understand a fuller spectrum of design outcomes, not just one or two preferred pathways, because of the complicated array of design flavors and the shifting implications once state plan choices interact.
- Because some choices matter more to asset value and revenues than others (and some lead to similar outcomes even across different pathways), a smart approach for stakeholders is to identify the critical decision points versus the ones they can afford to compromise around.
- With stakeholders already working to identify their optimal outcomes and starting to draw lines in the sand, it is imperative that affected sources do the same before the debate moves forward without them. ICF has been advising our clients to wade in, but given the stakes, with eyes wide open.



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### About the Authors



**Chris MacCracken** is a Principal with 15 years at ICF International. He leads the Environmental Regulations team within ICF's power business area, providing guidance to clients on the impacts of environmental regulation on emission, power and fuel markets, compliance planning, and asset valuations. His clients include electric utilities, independent power producers, industry associations, and non-governmental organizations. He is currently leading a number of efforts related to the Clean Power Plan.



**Matt Robison** is a Senior Manager with ICF International's Energy Advisory and Solutions team. He has been involved in writing and developing numerous papers, expert testimonies, and analyses for utility clients on market design, the impact of regulatory programs and incentives, and asset valuation.

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For questions and comments, please contact  
Chris MacCracken | [chris.maccracken@icfi.com](mailto:chris.maccracken@icfi.com) | +1.703.934.3277

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