

ICF OUICK TAKE

Finding the Path to Clean Power Plan Opportunity: Preparing Now to Identify the Greatest Risks and Benefits

By Chris MacCracken and Matt Robison



Getting Ahead of the Scramble

The release of the final rule for the Clean Power Plan (CPP) is likely to set off a mad dash among state regulators, utilities, and investors. States will have a number of critical design choices to evaluate as they move forward with their planning efforts—and a very short time to consider those choices and hear from the affected stakeholders. Initial state plans will be due within a year, final plans 1-2 years after. This will leave a narrow window for the lengthy tasks of analysis, stakeholder discussions, and state regulatory or legislative action.

Many states have launched their initial analytical process. The most forward-looking companies have already recognized just what a challenging task it will be to asses all of the potential combinations of compliance options and have begun taking steps to get ahead of the game by identifying their greatest threats and opportunities now.

What they are finding and quantifying is just how significant state compliance choices will be for their business. In ICF's March, 2015 white paper Clean Power Plan: Bigger Risks, More Opportunities than You Think, we presented a case study of two sample states to show how substantial the impacts could be on individual generating units, entire utility generation portfolios, and developers of energy efficiency and renewables projects, using just two of the key design questions for all states—whether to adopt rate-based or mass-based standards and whether to go it alone or partner with other states in a regional trading system.

Deciding on Optimal Outcomes...Before They Are Decided For You

To help companies get a handle on these kinds of potential impacts and start winnowing through the complicated choices ahead, ICF's approach is to use our CPP Navigator. The Navigator is a screening tool devised to help identify design options that can minimize compliance costs and maximize opportunities, and determine whether a given company's optimal design path will align or conflict with the paths for the state as a whole, or for other companies in the state. It reports key metrics at the

Key Findings from ICF White Paper State Case Study—Choose Wisely

The case study highlighted two anonymous, real-world neighboring states and their relevant company and generating unit data. State A contains Company A, which operates coal generating Unit A. State B contains Company B, which operates coal generating Unit B. State A has a higher rate standard than State B, which results in a lower cost of compliance for Company A than for Company B.

- **UNIT IMPACTS:** in a scenario where both states choose a rate-based standard and state-based program, Unit A prospers with higher gross margins while unit B suffers. If the states move to regional trading, Unit A suffers while Unit B gets a 20% bump up in gross margin. In a combination of a mass-based approach and regional trading, Unit A falls below baseline gross margin, while B jumps to 115% of the baseline.
- PORTFOLIO IMPACTS: While Portfolio B gets hammered under a rate-based state-only case, losing 40% of its gross margin, Portfolio A benefits from an added 14% gross margin. But as one moves through scenarios to a state-based mass cap, then a regional trading rate-based system, and finally a regional mass cap, Portfolio B does steadily better and A does worse until they achieve parity in the final scenario.
- **RENEWABLES:** a new wind unit in State B will garner at least 10% greater gross margin relative to a business-as-usual case across all four scenarios, but a state-only rate-based approach yields an over 60% gain in gross margin.

1 icfi.com © 2015 ICF International, Inc.





icfi.com

©2015 ICF International, Inc.

Any views or opinions expressed in this quick take are solely those of the author(s) and do not necessarily represent those of ICF International. This quick take is provided for informational purposes only and the contents are subject to change without notice. No contractual obligations are formed directly or indirectly by this document. ICF MAKES NO WARRANTIES, EXPRESS, IMPLIED, OR STATUTORY, AS TO THE INFORMATION IN THIS DOCUMENT.

No part of this document may be reproduced or transmitted in any form, or by any means (electronic, mechanical, or otherwise), for any purpose without prior written permission.

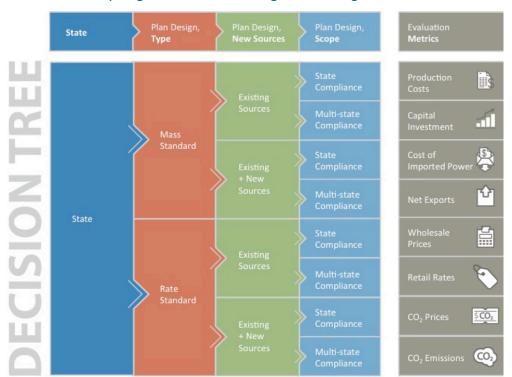
ICF and ICF INTERNATIONAL are registered trademarks of ICF International and/or its affiliates. Other names may be trademarks of their respective owners.

About ICF International

ICF International (NASDAQ:ICFI) provides professional services and technology solutions that deliver beneficial impact in areas critical to the world's future. ICF is fluent in the language of change, whether driven by markets, technology, or policy. Since 1969, we have combined a passion for our work with deep industry expertise to tackle our clients' most important challenges. We partner with clients around the globeadvising, executing, innovating—to help them define and achieve success. Our more than 5,000 employees serve government and commercial clients from more than 70 offices worldwide. ICF's website is www.icfi.com.

state and company levels for each possible combination of plan design variables. The version of the tool depicted below captures the key design questions of adopting rate-based or mass-based standards, including new fossil generation sources, and participating in a multi-state program. Alternative structures may address the processes for converting EPA's rate standards to mass caps or critical market elements, such as the penetration of energy efficiency and renewables. Using the CPP Navigator as a screen allows stakeholders to quickly narrow their focus to the most impactful design pathways as a first step in teasing out which of a host of design decisions will best match their goals.

How ICF is Analyzing These Issues through CPP Navigator



Regardless of how companies decide to examine and quantify the risks and benefits of various state compliance pathways, the key is to get as early a jump on the process as possible. The decisions on the basic form of initial state plans will be made in a matter of months following the final rule, after which changing course clearly becomes much harder. Using the CPP Navigator, ICF can help your company use the upcoming months wisely to narrow your scope, hone your focus on the most critical questions, and be ready to lead the process following the final rule, rather than playing catchup.

For questions, please contact:

Chris MacCracken | +1.703.934.3277 | chris.maccracken@icfi.com