EDITOR’S NOTE: LOW CARBON FUEL STANDARD
Victoria Prussen Spears

SEVEN TAKEAWAYS FROM CALIFORNIA’S EXTENSION OF THE LOW CARBON FUEL STANDARD
Joshua T. Bledsoe and Kimberly D. Farbota

IRS SHEDS NEW LIGHT ON SOLAR TAX CREDITS, LEAVES ENERGY STORAGE IN THE DARK
Jamie Jackson Hansen, Stephen J. Humes, Mark C. Kalpin, and Seth R. Belzley

COURT FAULTS FERC IN ITS HANDLING OF ANR STORAGE COMPANY’S SIX-YEAR QUEST FOR AUTHORIZATION TO CHARGE MARKET-BASED RATES FOR NATURAL GAS STORAGE SERVICES
James F. Bowe, Jr., and William E. Rice

NEW HOLDING PERIOD RULES FOR CARRIED INTERESTS AND THE IMPACT ON UPSTREAM OIL AND GAS
Michele J. Alexander, Lance W. Behnke, and Steven J. Lorch

MAY THE FORCE BE WITH YOU: FORCE MAJEURE CLAUSES IN THE ENERGY SECTOR
Matthew Lo, Dan Jewell, James Carter, and Jean-Pierre Douglas-Henry
Seven Takeaways from California’s Extension of the Low Carbon Fuel Standard

By Joshua T. Bledsoe and Kimberly D. Farbota*

The authors of this article outline seven takeaways from the California Air Resources Board’s Resolution 18-34, which extends the Low Carbon Fuel Standard Program to 2030 and makes significant changes to the design and implementation of the Program.

The California Air Resources Board (“CARB”) passed Resolution 18-34, extending the Low Carbon Fuel Standard (“LCFS”) Program to 2030 and making significant changes to the design and implementation of the Program. This article outlines seven takeaways for market participants and stakeholders.

1. CARB APPEARS COMMITTED TO THE LCFS

While California’s Cap-and-Trade Program attracts the lion’s share of attention in the trade press, CARB may view the LCFS as an equally important greenhouse gas (“GHG”) emissions reduction measure. According to CARB, the Cap-and-Trade Program’s traditional role in the state’s overarching scheme has been to backstop GHG reductions, not drive them. Under this interpretation, the Cap-and-Trade Program has acted as an insurance policy guaranteeing the state’s GHG emissions reduction trajectory via operation of the program’s hard cap in the event that other, more direct emissions reduction measures fail to achieve expected reductions (e.g., the Renewables Portfolio Standard, Advanced Clean Car Standards, Title 24 Energy Efficiency Standards, the LCFS, etc.).

However, given the stringency of the state’s GHG emissions reduction target for 2030 (40 percent below 1990 emission levels), CARB acknowledges in the 2017 Scoping Plan Update that the post-2020 Cap-and-Trade Program would need to deliver 236 million metric tons of carbon dioxide equivalent (“MTCO2e”) of reductions from 2021 to 2030. While the Cap-and-Trade Program largely seeks out the lowest-cost ways to reduce GHG emissions across the Californian economy, direct emissions reduction measures are more targeted and more

---

* Joshua T. Bledsoe is counsel in the Environment, Land & Resources Department at Latham & Watkins LLP focusing on complex infrastructure and development projects, particularly those utilizing renewable or low-carbon technologies. Kimberly D. Farbota is an associate in the firm’s Environment, Land & Resources Department focusing on land use and environmental matters, with an emphasis on projects utilizing renewable or low-carbon technologies. The authors may be reached at joshua.bledsoe@lw.com and kimberly.farbota@lw.com, respectively.


costly. Nonetheless, CARB is relying on the LCFS to hasten the commercial-
ization and deployment of alternative fuels, primarily renewable electricity for
plug-in electric vehicles (“PEVs”). The LCFS also may be critical to the state’s
efforts to meet federal ozone standards, since the Program indirectly regulates
traditional criteria, such as emissions associated with gasoline and diesel
combustion.

2. CARB SOFTENS, THEN STRENGTHENS CARBON INTENSITY
REDUCTION TARGETS

On March 6, 2018, CARB proposed to soften the carbon intensity (“CI”)
reduction targets for 2019 and 2020. Notably, CARB had not suggested that
these targets would be weakened during any of the 22 public workshops and
fuel-specific working group meetings held in 2016 and 2017. Accordingly,
market participants were taken by surprise, and LCFS credit prices temporarily
dipped in response. LCFS credit market observers had been projecting
increasing credit prices to go along with more stringent CI reduction targets,
largely due to concerns that sufficient volumes of alternative fuels would not
materialize. Conversely, CARB proposed a more stringent CI reduction target
of 20 percent for 2030, a figure significantly higher than the 18 percent the
market had anticipated. The Table 1 summarizes previous and current
reduction targets.

3. THE LCFS’ SOFT PRICE CAP COULD BE TESTED SOON

The LCFS includes a credit clearance market (“CCM”) whereby regulated
parties can purchase credits from other market participants to eliminate credit
shortfalls. In the event of a credit shortfall, an inflation-adjusted credit price
ceiling of $200 would apply. CARB would publish the names of entities
participating in the CCM, including the number of credits that each
participating entity must buy or sell, raising the possibility that regulated parties
would avoid the CCM for fear of revealing their market position to counterparties.
As such, market participants have long expressed concern about the CCM’s
ability to cap prices effectively, noting its potential to distort the LCFS credit
market in ways CARB had not envisioned.

Given recent credit pricing trends and a continuing drawdown of the
cumulative credit bank, the CCM’s functionality could soon be tested. The
credit bank, which had been growing since Program launch due to over-
compliance, peaked in Q4 2016 before shrinking significantly in Q1 2018 and
Q2 2018 (the most recent quarter for which CARB has posted data) as deficit
generation outpaced credit generation. For the week of October 22-28, 2018,
CARB reports an average credit price of $182.70, compared with an average
credit price of $91 in October 2017. CARB Resolution 18-34 notably directs
CARB staff “to monitor the cost containment provisions of the Low Carbon
SEVEN TAKEWAYS FROM CALIFORNIA’S EXTENSION OF THE LOW CARBON FUEL STANDARD

Fuel Standard, including the CCM, and to propose technical adjustments through future rulemaking if needed to further strengthen the cost containment features of the program.7

Table 1: Comparison of Previous and Current Percent Reduction Requirements for Carbon Intensity From 2019 to 2030

<table>
<thead>
<tr>
<th>Year</th>
<th>Previous reduction target</th>
<th>Current reduction target</th>
<th>Year</th>
<th>Previous reduction target</th>
<th>Current reduction target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>7.5%</td>
<td>6.25%</td>
<td>2025</td>
<td>10%</td>
<td>13.75%</td>
</tr>
<tr>
<td>2020</td>
<td>10%</td>
<td>7.50%</td>
<td>2026</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>2021</td>
<td>10%</td>
<td>8.75%</td>
<td>2027</td>
<td>10%</td>
<td>16.25%</td>
</tr>
<tr>
<td>2022</td>
<td>10%</td>
<td>10%</td>
<td>2028</td>
<td>10%</td>
<td>17.5%</td>
</tr>
<tr>
<td>2023</td>
<td>10%</td>
<td>11.25%</td>
<td>2029</td>
<td>10%</td>
<td>18.75%</td>
</tr>
<tr>
<td>2024</td>
<td>10%</td>
<td>12.5%</td>
<td>2030</td>
<td>10%</td>
<td>20%</td>
</tr>
</tbody>
</table>

4. CARB CREATIVELY UNDERCUTS THE LCFS’ TRADITIONAL FUEL NEUTRALITY

Facing potential shortages in the credit market and concomitant price spikes that could threaten the Program’s political tenability, the LCFS extension package creates additional opportunities to generate credits. In particular, the LCFS now allows credit generation from Carbon Capture and Sequestration (“CCS”) projects, carbon efficiency improvements at petroleum refineries, installation of fast PEV charging, and hydrogen fueling stations—regardless of how much fuel those stations dispense. While the inclusion of CCS projects and refinery process improvements remain tethered to the Program’s focus on crediting real, verifiable reductions in transportation sector GHG emissions, producers of liquid alternative fuels have criticized the new ability to generate LCFS credits from the installation of fueling capacity.

Some low carbon fuel producers assert that CARB is “putting its thumb on the scales” for PEVs and “picking a winner” in violation of the Program’s foundational commitment to fuel neutrality, rather than letting the LCFS credit market identify the lowest cost source of GHG emissions reductions. Electric utilities, PEV charging station developers, and PEV manufacturers unsurprisingly hold a different view. CARB staff have implicitly acknowledged the LCFS extension package’s preference for electrification by remarking that they have been directed to prioritize zero tailpipe emission technologies. First, Senate Bill 3503 (passed in 2015) established widespread transportation electrification as “the policy of the state” and a legislatively recognized means to achieve both

---

3  https://www.cleanenergylawreport.com/finance-and-project-development/legislative-update-
ambient air quality standards and the state’s climate goals. Second, Executive Order B-48-18 directed CARB to work with the private sector and all appropriate levels of government to spur the construction and installation of 200 hydrogen-fueling stations and 250,000 zero-emission vehicle chargers, including 10,000 direct current fast chargers, by 2025. Notably, Executive Order B-48-18 also ordered CARB to recommend ways to expand zero-emission vehicle infrastructure through the LCFS, the results of which can be seen in the LCFS extension package.

5. PROJECT FINANCE AND CCS PROJECTS

To produce alternative fuels at the volumes required to generate an adequate number of LCFS credits to achieve the CI reduction targets outlined above, additional infrastructure must be developed and, critically, financed. Historically, projects have struggled to secure affordable capital for projects that generate a significant portion of their revenue from the monetization of LCFS credits and Renewable Fuel Standard (“RFS”) Renewable Identification Numbers (“RINs”). Several factors contribute to this difficulty, including traditional capital providers’ lack of familiarity with the LCFS and the RFS, change-in-law risk, litigation risk, and credit price risk. Indeed, long-term offtake agreements for LCFS credits simply have not been available. These agreements provide a key contractual mechanism for securing capital to build low-carbon fuel production facilities. Perhaps even more important was the perception that the LCFS Program would plateau in 2020 (in terms of CI reductions).

With CARB’s action to extend the LCFS to 2030 and the emerging consensus on the LCFS’ importance to the state for both climate goals and traditional ambient air quality standard attainment, additional capital may begin flowing into the low-carbon fuels space. Of course, the current high LCFS credit prices and the prospects for even higher prices in the future (including in excess of the CCM cap) also draw interest in this market segment.

Included in the LCFS extension package is Appendix B: Carbon Capture And Sequestration Protocol Under The Low Carbon Fuel Standard. As foreshadowed in CARB’s 2015 LCFS rulemaking, CARB now will issue LCFS credits to projects that sequester carbon dioxide, provided those projects have the requisite nexus to the California transportation fuels market. The type of credit accrual varies depending on the CCS project’s connection to California. CARB will issue LCFS credits on a standalone basis at a 1:1 ratio for carbon dioxide sequestered...
by oil and gas production sites. Moreover, CARB will lower an alternative fuel’s CI score according to the carbon dioxide sequestered on a life cycle basis. Combined with the recently augmented federal 45Q tax credits for CCS projects, which notably can be “stacked” with LCFS credits, new CCS projects are gaining traction.

6. PEV CHARGING WILL BE 100 PERCENT RENEWABLE SOONER RATHER THAN LATER

The LCFS previously required that PEV charging have on-site renewable generation in order to benefit from a zero CI score (e.g., solar panels installed on top of a charging station). In the LCFS extension package, CARB mimicked an approach long-permitted for renewable natural gas fuel pathways and applied it to PEV charging. The LCFS now allows “book-and-claim” accounting for PEV charging, which means charging stations can buy renewable power generated offsite (e.g., from a solar farm in the California desert region) and attain a zero CI score. With this lower CI score, charging stations will generate more LCFS credits for every kilowatt-hour delivered to PEVs. Given the economic benefit of switching for grid-sourced power to renewables, most non-residential PEV charging likely will convert to 100 percent renewable power. While the role of Load Serving Entities (i.e., investor-owned utilities, publicly owned utilities, and community choice aggregators), oversight by the California Public Utilities Commission of the Investor-Owned Utilities, and individual residents’ rate preferences complicate the future of residential PEV charging, the same directional incentive exists for Load Serving Entities to channel renewable power toward PEVs.

7. LITIGATION IS DORMANT, BUT NOT DEAD

State Litigation: POET I and POET II

The POET I case arose from Petitioner POET, LLC’s challenges to the original LCFS regulation adopted by CARB in 2009. On April 10, 2017, the California Court of Appeal for the Fifth Appellate District ruled that CARB failed to faithfully execute a writ of peremptory mandate requiring the agency to address nitrogen oxide (“NOx”) emissions from biodiesel in compliance with the California Environmental Quality Act. The LCFS extension package that CARB approved in September includes an analysis of NOx emissions attributable to the LCFS, which was prepared in an attempt to fulfill the writ of mandate issued in POET I.

---

5 https://www.cleanenergylawreport.com/?s=LCFS.
CARB signaled in its Regulatory Guidance Document 18-01 (released March 12, 2018) that it would ask the Superior Court of California to discharge the writ of mandate in POET I, after CARB approved the LCFS extension package and associated environmental analysis. Thus, on October 11, 2018, CARB filed its Final Return to the Modified Writ of Mandate and claimed that the agency fully satisfied the writ. Perhaps the most noteworthy aspect of this filing for market participants is CARB’s reiteration of its pledge to adhere to the 2017 LCFS standard for conventional diesel and its substitutes until the superior court discharges the modified writ. Regulatory Guidance Document 18-01 indicates that the CI target for diesel fuels will remain frozen at 2017 levels until, at the earliest, Q1 2019. Given the timing of the filing, CARB likely is seeking to ratchet down the CI target for diesel fuels in Q1 2019.

In the case commonly referred to as POET II, petitioner POET, LLC challenged the LCFS and Alternative Diesel Fuels (“ADF”) regulations adopted by CARB in 2015. The Fresno County Superior Court on January 5, 2018 granted CARB’s motion for judgment on the pleadings with respect to all claims and dismissed the entire POET II case as moot. On March 6, 2018, POET noticed an appeal of the superior court’s decision to the California Court of Appeal for the Fifth Appellate District. The appeal largely has been dormant since then, as the parties presumably have been awaiting CARB’s approval of the LCFS extension package. The most recent activity occurred on July 23, 2018, when the Court of Appeal granted a joint application to extend the briefing schedule, with POET’s opening brief now due January 22, 2019. Since CARB has now approved the LCFS extension package, the ripeness issues cited in the superior court’s dismissal may no longer apply.

Federal Litigation: Rocky Mountain and O’Keeffe

In Rocky Mt. Farmers Union v. Corey, the U.S. Court of Appeals for the Ninth Circuit addressed a challenge to the LCFS by the American Fuels & Petrochemical Manufacturers Association and Growth Energy, a corn ethanol industry trade group. The Ninth Circuit rejected claims that the LCFS was facially discriminatory and, therefore, violated the Dormant Commerce Clause of the U.S. Constitution. The Ninth Circuit found that states have a legitimate interest in combatting the effects of climate change on their citizens, and that while out-of-state fuels may have higher CIs given the energy needed to

---

8 740 F.3d 507 (2014) ("Rocky Mountain I").
SEVEN TAKEAWAYS FROM CALIFORNIA’S EXTENSION OF THE LOW CARBON FUEL STANDARD

physically deliver fuels to California, the LCFS discriminates based on CI, not state of origin. Following the Rocky Mountain I decision, the U.S. Supreme Court denied certiorari, effectively affirming the Ninth Circuit’s 2014 holding.9

Following the Rocky Mountain I decision, the case was remanded to the Eastern District of California (i.e., the trial court) for further proceedings under the more lenient (from the state’s perspective) Dormant Commerce Clause standard, the “Pike balancing test.” Following a series of supplemental briefings addressing new developments in the LCFS landscape (e.g., CARB rulemaking) and a flurry of motions to dismiss, the district court ultimately rejected Plaintiffs’ claims under the Pike balancing test, issuing a final opinion dismissing Plaintiffs’ final claim on August 14, 2017. Plaintiffs timely appealed to the Ninth Circuit.10

On September 7, 2018, the Ninth Circuit in American Fuel & Petrochemical v. O’Keeffe,11 upheld Oregon’s Clean Fuels Program (“CFP”), dismissing the challenge from American Fuels & Petrochemical Manufacturers Association and Growth Energy that alleged the CFP unconstitutionally discriminates against out-of-state fuels. Closely modeled on the LCFS, the CFP provides economic incentives for fuels that result in lower lifecycle GHG emissions. Like the LCFS, the CFP requires fuel producers to meet declining CI targets, and providers of higher CI fuels must procure credits generated by providers of lower CI fuels in order to comply. Citing its own 2014 decision in Rocky Mountain I,12 the three-judge panel issued a 2-1 decision upholding the CFP and affirming that the Oregon program does not violate the Dormant Commerce Clause of the U.S. Constitution. As in Rocky Mountain I, the Ninth Circuit found that states have a legitimate interest in combatting the effects of climate change on their citizens. Moreover, while out-of-state fuels may have higher carbon intensities given the energy needed to transport fuels to (in this case) Oregon, the CFP discriminates based on CI, not state of origin.

In the Rocky Mountain II briefing, plaintiff-appellants assert that the LCFS “lifecycle analysis,” which assesses the CI of transportation fuels based on how they are produced and transported, imposes unconstitutional regulations on the out-of-state activities of out-of-state businesses. Plaintiff-appellants further contend that imposing such economic barriers on out-of-state products violates constitutional principles of structural federalism. This argument allegedly

---

10 “Rocky Mountain II.”
differs from that posed in *Rocky Mountain I*, in which the same plaintiffs similarly claimed unconstitutionality under the Dormant Commerce Clause. Defendant-appellee State of California counters that this issue was laid to rest in *Rocky Mountain I*, and that the prior holding forecloses any claims of extraterritorial regulation. The state notes that plaintiff-appellants' claim directly contravenes the Ninth Circuit’s earlier decision in *Rocky Mountain I*, without citing any distinguishing circumstance. Furthermore, the state asserts that the "structural federalism" claim is simply rewriting the Dormant Commerce Clause claim, relying on the same sections of the Constitution and evaluated under the same judicial test.

The oral argument in *Rocky Mountain II* occurred before the Ninth Circuit on September 26, 2018. Between the submission of the parties' briefs and the oral argument, the Ninth Circuit issued its opinion in *O'Keeffe*. At oral argument in *Rocky Mountain II*, counsel for plaintiff-appellants conceded that the instant Ninth Circuit panel was bound by the *Rocky Mountain I* and *O'Keeffe* decisions as they apply to claims regarding extraterritorial regulation and unconstitutional commercial discrimination. Plaintiff-appellants unsuccessfully moved to forgo oral argument, and intimated that the decision to file the motion was based on an understanding that—in light of the aforementioned precedent—only the U.S. Supreme Court could find in plaintiff-appellants' favor. Given the close timing of the *O'Keeffe* opinion, the motion to forgo oral arguments, and the oral arguments themselves, plaintiff-appellants likely elected to see the case through in light of time and resources already expended on preparing for the *Rocky Mountain II* hearing.

If California prevails in *Rocky Mountain II*, then plaintiff-appellants would have the opportunity to petition the U.S. Supreme Court for certiorari; indeed, plaintiff-appellants have hinted at seeking such review. Given the U.S. Supreme Court's unusual intervention in climate-related regulation (halting implementation of the Clean Power Plan) and climate-related litigation (issuance of a temporary stay on the eve of trial in *Juliana, et al. v. United States*), as well as the recent confirmation of Justice Kavanaugh, *Rocky Mountain II* should be followed closely by industry stakeholders.
Pratt’s Energy Law Report is published 10 times a year by Matthew Bender & Company, Inc. Periodicals Postage Paid at Washington, D.C., and at additional mailing offices. Copyright 2018 Reed Elsevier Properties SA, used under license by Matthew Bender & Company, Inc. No part of this journal may be reproduced in any form—by microfilm, xerography, or otherwise—or incorporated into any information retrieval system without the written permission of the copyright owner. For customer support, please contact LexisNexis Matthew Bender, 1275 Broadway, Albany, NY 12204 or e-mail Customer.Support@lexisnexis.com. Direct any editorial inquires and send any material for publication to Steven A. Meyerowitz, Editor-in-Chief, Meyerowitz Communications Inc., 26910 Grand Central Parkway Suite 18R, Floral Park, New York 11005, smeyerowitz@meyerowitzcommunications.com, 646.539.8300. Material for publication is welcomed—articles, decisions, or other items of interest to lawyers and law firms, in-house energy counsel, government lawyers, senior business executives, and anyone interested in energy-related environmental preservation, the laws governing cutting-edge alternative energy technologies, and legal developments affecting traditional and new energy providers. This publication is designed to be accurate and authoritative, but neither the publisher nor the authors are rendering legal, accounting, or other professional services in this publication. If legal or other expert advice is desired, retain the services of an appropriate professional. The articles and columns reflect only the present considerations and views of the authors and do not necessarily reflect those of the firms or organizations with which they are affiliated, any of the former or present clients of the authors or their firms or organizations, or the editors or publisher.

POSTMASTER: Send address changes to Pratt’s Energy Law Report, LexisNexis Matthew Bender, 121 Chanlon Road, North Building, New Providence, NJ 07974.