Multibillion-Dollar Oil Scandal Goes Unaddressed in PREPA Contract Reform and Privatization

History is Repeating Itself in Puerto Rico



July 2018

Tom Sanzillo, Director of Finance Cathy Kunkel, Energy Analyst

Table of Contents

Executive Summary	. 2
The Oil Industry's History With PREPA: Fraud, Evasion of Oversight, Budget Distortions	. 4 . 7 . 8 . 9 for
Recent Privatization and Contracting Reforms Fail to Heed Past	13 15
Scandal May Give Bondholders Grounds for Claims in PREPA Bankruptcy Proceedings	18
Conclusion	20
Appendix: Index of Agencies/Oversight Bodies	20

Executive Summary

The single largest expense in the operating budget of the Puerto Rico Electric Power Authority (PREPA) is its purchase of oil to fuel the agency's power generation plants.

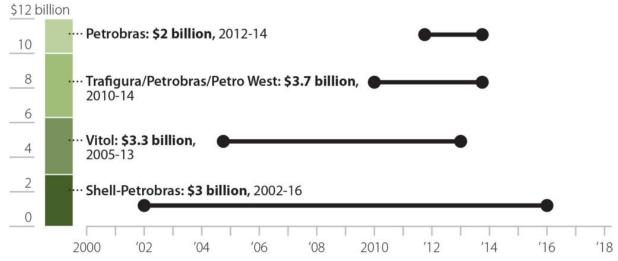
From 2002 through 2017, PREPA fuel purchases (predominantly oil) totalled \$27.7 billion.

The oil companies and traders who received this revenue effectively controlled PREPA's operations for decades—and in fact still do so—benefiting from corruption and management negligence to a degree that has not been well understood outside Puerto Rico.

At the heart of the scandal reviewed in this paper was a fraudulent scheme by which PREPA bought low -quality oil at high-quality prices for perhaps as long as 30 years. A Puerto Rico Senate investigation has recommended that the fraud in question be prosecuted. Consumers are pursuing a class action suit for damages, and this report recommends that bondholders also pursue claims.

Questionable Oil Payments

Oil suppliers were able to deliver poor-quality oil to Puerto Rico while being paid high-quality prices for years. Every aspect of the process, including testing by three laboratories that PREPA would pay only if the labs certified the shipments, was part of the scheme, according to a Puerto Rico Senate report.



Source: U.S. District Court documents.

PREPA is playing a pivotal role in Puerto Rico's rebuilding effort after the island was devastated by hurricanes in the fall of 2017, and the fate of Puerto Rico hinges on the fate of PREPA. A law enacted in June 2018 to privatize PREPA via a series of asset sales and concessions must be understood in the context of the oil industry's fight to maintain its political and economic control over Puerto Rico's electricity system.

The Institute for Energy Economics and Financial Analysis has examined the history of the contractual relationship between PREPA and the oil companies with which it does business; lessons learned from the procurement and budget process in question; and how efforts to reform the process so far have failed. Although the weaknesses in the agency's procurement

and contracting processes are clear, they are not addressed in the recently-enacted privatization law ostensibly designed to transform PREPA.

Instead, the new law and other contracting reforms spurred by a 2017 executive order, provide a fresh opening for outside fossil fuel interests to continue to effectively control PREPA. Despite the fact that PREPA's current fiscal plan, recently certified by the Financial Oversight and Management Board for Puerto Rico (FOMB), sees PREPA's overreliance on fossil fuels as financially unsustainable, operational reforms proposed by both the Legislature and the governor only perpetuate unaccountable contracting and budgeting processes. These processes are tethered to global oil interests abetted by politicians in Washington that have consistently acted against the interests of Puerto Rico.

IEEFA's principal findings:

- From 2002-2014, PREPA paid over \$23 billion for fuel deliveries, and fuel costs have represented 39%-61% of PREPA's annual operational expenses.
- PREPA's Fuel Office² played a pivotal role in a scheme³ that paid oil suppliers top
 dollar for poor-quality oil. The scheme, which began to come to light over a decade
 ago in a review by the Puerto Rico Office of the Comptroller, has gained scant public
 notice and remains a largely overlooked issue.
- The scandal in question, though it can be traced back many years, has significant implications today, especially with regard to management reforms that are needed to rebuild PREPA.
- Neither PREPA, the FOMB, nor Gov. Ricardo Rosselló have addressed the issues in any publicly-known reform effort.
- An important review by the Puerto Rico Senate in 2016 led to very little follow-up by the executive branch of government. Efforts since then to reform PREPA's general procurement policies have been perfunctory and were initiated only half-heartedly after the Whitefish Energy scandal created a wave of public outrage.
- Neither the recently-certified PREPA fiscal plan nor PREPA's FY 2019 budget make any mention of much-needed reforms of the PREPA Fuel Office.
- Efforts by auditors and employees at PREPA to expose the oil-purchasing scheme in question have been suppressed.
- The Senate report and a consumer class action suit brought against PREPA and the oil companies are replete with examples of actions by some of these individuals aimed

¹ PREPA Certified Fiscal Plan, April 19, 2018, p. 52. The plan identifies an aspirational goal of a 20-25% fuel reduction (\$400-\$500 million annually). Page 51 calls for the achievement of long term cost reductions through a reconfiguration of PREPA's operating assets and increased investment in low cost renewable energy. Pages 12, 20, 26, 82, 84, 88 and 90 identify the problem, showing how the proposed planning process will emphasize renewable energy and provide new planning mix strategies to be tested by the IRP process.

² In different documents, this office is also referred to as the Fuel Purchasing Office (Special Commission for the Study of the Standards and Procedures Related to the Purchase and Use of Oil by the Puerto Rico Electric Power Authority and of Government Integrity, Final Report, December 5, 2016) or as the Fuel Oil Office (*Marrero-Rolón v. Autoridad De Energia Electrica De P.R. ("PREPA"*), Civ. No. 15-1167 (JAG) (D.P.R. Aug. 5. 2016), ECF No. 367 ("Third Amended Class Action Complaint").

³ M. Williams Walsh, "In scandal at Puerto Rico utility, ex-fuel buyer insists he took no bribes," New York Times, March 2, 2016.

at limiting exposure and preventing remedies from being enacted.

- PREPA leaders and other government officials have demonstrated a persistent pattern of behavior that impairs improvement of the oversight of PREPA.
- A newly-enacted PREPA privatization law⁴ remedies none of PREPA's persistent financial mismanagement problems. It fails to require strict contract negotiating procedures to prevent corruption and fails to adequately reform the processes by which PREPA management and Puerto Rico's utility regulators are exposed to political interference. It does not prioritize renewable energy for capital investment, despite the critical role that renewables can play in helping PREPA become solvent.

The commonwealth of Puerto Rico cannot advance, much less thrive, without an affordable and reliable electricity system. PREPA's history of mismanagement and corruption—the most glaring examples of which can be seen in the agency's Fuel Office operations and in the oil-purchasing scheme described in this report—remains a major impediment to its success and to its ability to maintain access to capital markets.

PREPA currently owes over \$8 billion to bondholders who may have grounds to make claims for damages caused by PREPA's mismanagement and corruption in the oil-procurement practices described here.

If Puerto Rico does move forward in building more sources of renewable energy—as the FOMB, PREPA and the governor have committed to do in the budget and in the PREPA fiscal plan—an unintended but positive consequence may be a loosening of the corrupt grip that the fossil fuel sector has on PREPA.

The Oil Industry's History With PREPA: Fraud, Evasion of Oversight, Budget Distortions

High-Quality Prices for Low-Quality Oil

PREPA's history with the oil industry is characterized significantly by a long-standing scheme to sell low-quality oil at high-quality prices. The scheme, which appears to have gone on for as long as three decades 5 has been exposed previously through an investigation completed by the Puerto Rico Senate6 and a consumer class action lawsuit filed in 2015 and still pending in the courts.

PREPA's Fuel Office, an operation responsible for the agency's fuel purchases—issuing bid invitations, bid evaluations and management of contracts (with oil suppliers and laboratories), scheduling and payment approvals—played a pivotal role in the scheme.⁷

⁵ Third Amended Class Action Complaint, ¶ 84 (referring to fraudulent oil testing going back as far the 1980s).

⁴ Act 120-2018, June 20, 2018.

⁶ Special Commission for the Study of the Standards and Procedures Related to the Purchase and Use of Oil by the Puerto Rico Electric Power Authority and of Government Integrity, Final Report, December 5, 2016.

⁷ The potential for conflict in the many functions performed by the Administrator of the Fuel Office was noted in a 2002 audit by the Puerto Rico Comptroller's Office.

The scheme worked like this, according to the Senate report:

PREPA used three laboratories⁸ to test the quality of oil that arrived in Puerto Rico. If a lab found that a fuel sample did not meet the specifications that PREPA desired, PREPA would have a different lab re-do the analysis and the first lab would not be paid for its services. If the second lab found that the fuel met specifications, that lab would be paid for its testing services. The result of this process was that from 2008 through 2014, over 75% of testing was done by one laboratory, Saybolt, which was found to have improperly calibrated its equipment to return results that met PREPA's desired specifications.⁹ The other two laboratories PREPA used also altered their equipment calibrations in order to receive more of PREPA's business. An executive of Alchem Laboratory, one of the other two laboratories in question, which changed its testing procedure in 2010 to ensure that substandard oil quality appeared to comply with contract standards, told the Senate investigation committee, "in the oil world, nobody wants to hear that their product is bad." ¹⁰

The result of the scheme outlined in the Senate report and described in the class action lawsuit was that PREPA's oil suppliers were able to deliver poor-quality oil to Puerto Rico while being paid for high-quality oil. The costs were passed to PREPA's customers or absorbed by the agency, via borrowing for operating expenses or taking resources away from other needs. Because there is no public record of the actual quality of the oil delivered to PREPA, additional investigation would be needed to discover the actual amount of the financial damage to PREPA and its stakeholders. Additional investigation is likely also required to understand the full range of players involved in this scheme.

The Senate report found major irregularities involving PREPA employees, multiple oil suppliers and oil-testing laboratories. The findings of the Senate investigation were turned over to the FBI and a federal prosecutor in 2016.¹¹ No charges have been filed in connection with the investigation.

Activity similar to that described in the Senate report was cited in a 2015 class action lawsuit in U.S. district court¹² brought by ratepayers against PREPA, some current and former PREPA employees, the three fuel testing laboratories, and several oil suppliers, including Petrobras America, Inc. and Petroleo Brasileiro S.A. ("Petrobras"), Shell Trading U.S. Company, Puma Energy Caribe, ¹³ Trafigura, ¹⁴ Petro West, Inc., and Vitol, Inc. ¹⁵ The lawsuit seeks treble damages, among other relief, for violations of the federal Racketeer Influenced and Corrupt Organizations ("RICO") statute. The complaint was later amended to include additional information.

Each of the supplier companies, individually or in concert with others, was involved in selling of oil to PREPA, and the lawsuit alleges that every shipment delivered to PREPA by the oil

⁸ The companies named in the Senate Report and a pending class action lawsuit: Inspectorate America Corporation ("Inspectorate"); Core Laboratories N.V. d/b/a Saybolt ("Saybolt"); Altol Chemical Environmental Laboratory, Inc., d/b/a Alchem Laboratory, and Altol Environmental Services, Inc. d/b/a Altol Enterprises (collectively "Alchem").

⁹ Special Commission for the Study of the Standards and Procedures Related to the Purchase and Use of Oil by the Puerto Rico Electric Power Authority and of Government Integrity, Final Report, December 5, 2016, p. 40.

¹⁰ Ibid., p. 29.

¹¹ M. Correa Velázquez, "Pesquisas del FBI impactarán el país," El Vocero, April 6, 2017.

¹² Class Action Complaint, *Marrero-Rolón v. PREPA*, Civ. No. 15-1167 (JAG) (D.P.R. Feb. 24, 2015), ECF No. 1. The lead plaintiffs are five Puerto Rico residential and commercial electricity ratepayers.

¹³ Puma and Puma Caribe were originally named as defendants but removed from the suit on April 25, 2016, (ECF. No. 276)

¹⁴ Also, Trafigura Beheer B.V., Trafigura Limited, and Trafigura Argentina S.A. (collectively, with Trafigura A.G., "Trafigura")

¹⁵ Also, Vitol S.A., Inc.

supplier defendants since 2002 was non-compliant.¹⁶ According to the complaint, a Shell/Petrobras venture accounted for \$3 billion in sales to PREPA from 2002 through 2016.¹⁷ Petrobras supplied \$2 billion in fuel from August 2012 to November 2014.¹⁸ A Trafigura/Petrobras/Petro West deal accounted for an additional \$3.7 billion in sales from 2010-2014, ¹⁹ and a Vitol operation made sales to PREPA of \$3.3 billion from 2005-2013.²⁰

The current, amended complaint makes detailed allegations that describe a well-organized scheme, summarizing its essential aspects, analyzing the fundamental internal control weaknesses that allowed it and describing several instances of involvement by PREPA's board and upper management and providing several examples of actions taken by staff and management of PREPA to impair or otherwise frustrate the efforts of internal auditors to document the scheme. The lawsuit also describes close coordination between oil companies, laboratories and PREPA staff.

While the Puerto Rico Senate's investigation focused on 2008 to 2014, the class action lawsuit goes back much further. The current amended complaint references a 2002 audit by the Puerto Rico Comptroller's Office of PREPA's fuel purchasing practices for the period 1997 to 2001. That audit found that PREPA's lack of appropriate internal controls, which included violations to its own regulations, could lead to PREPA overpaying for poor-quality fuel.²¹ Violations included contracting with the same laboratories for chemical and quality testing that the fuel suppliers had used in an evident conflict of interest.²² The audit also referenced a lawsuit brought by an ex-employee²³ of a private fuel-testing laboratory who alleged that from 1993-1994 the laboratory falsified 500-600 test results on fuel purchased by PREPA and other entities.²⁴ The scheme, in other words, could have been in place long before the period covered by the Senate's investigation.

In response to multiple motions to dismiss the original class action complaint, the district court referred the matter to a federal magistrate judge. In a 65-page report, the magistrate judge recommended that the complaint's allegations "be deemed sufficient in most regards."²⁵ The district court subsequently entered an order largely adopting that magistrate judge's recommendations, which has allowed the plaintiffs to prosecute the bulk of their claims against the current named defendants.²⁶

The parties in the case await the district court's class certification decision. In the meantime, the case against PREPA has been automatically stayed as a result of PREPA's bankruptcy filing, and merits discovery as to all other defendants also appears to be on hold pending the class certification decision. Once the district court issues that decision, and if a class is certified and the case is not stayed as to all defendants, then the parties will likely proceed with merits discovery.

¹⁶ Third Amended Class Action Complaint, ¶ 101.

¹⁷ Ibid., ¶ 25.

¹⁸ Ibid., ¶ 19.

¹⁹ Ibid., ¶ 31.

²⁰ Ibid.. ¶ 34.

²¹ Puerto Rico Office of the Comptroller, Audit Report CP-02-26, May 13, 2002, pp. 8-12.

²² Ibid., pp. 11-12.

²³ Negron v. Caleb Brett U.S.A., Inc., Civ. No. 95-2478 (D.P.R.).

²⁴ Puerto Rico Office of the Comptroller, Audit Report CP-02-26, May 13, 2002, p. 15.

²⁵ Report and Recommendation, Marrero-Rolón v. PREPA (D.P.R. Sept. 29, 2015), ECF No. 214 ("R&R") at 2.

²⁶ Memorandum & Order, Marrero-Rolón v. PREPA (D.P.R. Mar. 31, 2016), ECF No. 254.

The magistrate judge's report included an observation of special note in regard to current reform initiatives at PREPA: Although governmental actions were taken to expose the scheme, the media reported on the problem in only a general way, and not very often.²⁷

Investigators: Widespread Contracting Irregularities

In addition to the fraud described above, the overly centralized power and lack of accountability of PREPA's Fuel Office facilitated other oil- contracting irregularities. For example, the Senate investigation found that PREPA, in violation of Puerto Rico law, knowingly entered into oil supply contracts with companies that had pleaded guilty to participating in corruption or fraud schemes in other jurisdictions.²⁸

In addition to its finding that PREPA's lack of adequate controls over fuel purchasing and analysis could lead to PREPA paying high-quality prices for low-quality fuel, the 2002 Puerto Rico Comptroller's Office audit found additional irregularities in the Fuel Office. These included: Destruction of documents related to PREPA's internal chemical laboratory from 1992 to 1994 (the lab was disbanded in 1994); failure by the Fuel Office to maintain an updated list of fuel contracts; payment for fuel before contract finalization; use of fuel suppliers who were not accredited as qualified PREPA suppliers; purchase orders used in place of contracts with fuel-testing laboratories that did not detail the tests to be performed or the amounts to be paid; verbal agreements with fuel suppliers to rent fuel storage tanks from PREPA with no documentation as to the rates and terms of the lease; and more. The audit also pointed out conflicting functions within the Fuel Office, with the administrator issuing bid invitations, receiving bid offers, advising the Bidding Board, making recommendations, sending award letters, approving purchase orders, receiving and approving invoices for payment, and recommending contract extensions.²⁹

The most recent audit of PREPA by the Puerto Rico Comptroller's Office, covering the period from January 1, 2011, through January 31, 2017, found continued contracting irregularities in fuel procurement that included: Allowing fuel suppliers to pass the cost of state excise taxes and municipal taxes to PREPA without submitting evidence that those taxes had been paid; failure to invoice oil suppliers for fuel storage tank lease costs until after the comptroller's office requested the invoices; an incomplete and unreliable system for tracking payments of fuel storage tank lease costs; failure to send oil purchase contracts to the comptroller's office in a timely manner; conflicting functions concentrated within the Fuel Office; and failure to comply with the law requiring PREPA to address faults identified by the comptroller's office as part of its audited financial review.³⁰

Although the 2017 audit does not refer to the 2002 audit, some of its findings are similar to those uncovered in the earlier audit.

²⁷ Report and Recommendation, Marrero-Rolón v. PREPA (D.P.R. Sept. 29, 2015), ECF No. 214 ("R&R"), pp. 18-24.

²⁸ Special Commission for the Study of the Standards and Procedures Related to the Purchase and Use of Oil by the Puerto Rico Electric Power Authority and of Government Integrity, Final Report, December 5, 2016, pp. 41-73.

²⁹ Puerto Rico Office of the Comptroller, Audit Report CP-02-26, May 13, 2002.

³⁰ Puerto Rico Office of the Comptroller, Audit Report CP-17-13, June 17, 2017.

Systematic Suppression of Findings

The class action lawsuit and the Senate investigation report detail a pattern of PREPA and laboratory staff being pressured,³¹ reassigned,³² reprimanded³³ or fired³⁴ whenever they attempted to expose and remedy the oil scheme. The Senate investigation recounts redrafting of a 2011 internal audit by individuals in PREPA management positions who were outside the authorized chain of command to change the audit findings and recommendations.³⁵ The class action amended complaint documents three additional internal audits related to the oil scheme that were halted and had their findings suppressed.³⁶

One of the arrangements identified in the amended complaint involved the appointment of a chief restructuring officer by PREPA in 2014 and how that appointment affected the internal operations of the Fuel Office. A staff person under suspicion as a key player in the scheme within PREPA decided to retire after the appointment was announced.³⁷ According to the amended complaint, PREPA staff expected increased scrutiny of agency operations by creditors of PREPA that would uncover the scheme and end it. But an expected housecleaning never took place.

Although PREPA had brought on AlixPartners in 2014 to negotiate a restructuring of PREPA's debt, the firm did not conduct a retrospective analysis of PREPA's operational structure or performance.³⁸ In testimony before the Puerto Rico Energy Commission in 2016, Lisa Donahue, an AlixPartners managing director and the then-chief restructuring officer at PREPA, stated that such a prudence review was outside the scope of the services Alix-Partners provided.³⁹

Donahue outlined three separate challenges faced by PREPA: Operational deficiencies, failure to implement best practices, and political interference.⁴⁰ Because of these challenges and because AlixPartners did not do a prudence review, Donahue presented a qualified opinion that costs incurred by PREPA for fiscal year 2014 had been reasonable and prudent.⁴¹ Donahue said also that a proposed bond transaction and operational savings would be successful.⁴² In short, then, PREPA and its advisors continued to say that operations were being carried out in a reasonable and prudent fashion even as significant, unaddressed management problems persisted in the Fuel Office.

Although PREPA signed a contract with Siemens in 2016 that was supposed to result in a public report on reform of PREPA's Fuel Office,⁴³ no such report appears on the websites of

³¹ See, e.g., Third Amended Class Action Complaint. ¶¶ 107-110, 122, 235-250.

³² Special Commission for the Study of the Standards and Procedures Related to the Purchase and Use of Oil by the Puerto Rico Electric Power Authority and of Government Integrity, Final Report, December 5, 2016, pp. 33-34.

³³ lbid., p. 34

³⁴ Third Amended Class Action Complaint. ¶¶ 223, 314.

³⁵ Special Commission for the Study of the Standards and Procedures Related to the Purchase and Use of Oil by the Puerto Rico Electric Power Authority and of Government Integrity, Final Report, December 5, 2016, pp. 33-34.

³⁶ Third Amended Class Action Complaint, ¶¶ 113, 250, 276.

 $^{^{37}}$ Ibid., ¶¶ 293-94.

³⁸ Puerto Rico Energy Commission Case No. CEPR-AP-2015-0001, Direct Testimony of Lisa Donahue, May 27, 2016, Lines 113-114.

³⁹ Ibid., Lines 115-116.

⁴⁰ Ibid., Lines 95-97.

⁴¹ Ibid., Line 133-138.

⁴² Ibid., Line 139-143.

⁴³ Contract between PREPA and Siemens Industry, Inc. dated October 20, 2016. The contract obligated Siemens to: "a. Evaluate PREPA's fuels replenishment planning process… b. Evaluate the organizational alignment of the fuels office within PREPA and any possible conflicts of interest this may create; c. Evaluate and compare PREPA's fuels office organizational

either the Puerto Rico Energy Commission or the Puerto Rico Legislature.

How the Fraud Contributed to PREPA's Physical and Financial Ruin

It is clear that PREPA's over-dependence on expensive oil has been a major factor in PREPA's march to physical and financial ruin over the past decade. The need to transition away from oil has been acknowledged by PREPA and the Financial Oversight and Management Board.

Coinciding with an increase in global oil prices, PREPA began to report operating losses in 2007.44 From 2007 until it went bankrupt in 2014, PREPA shortchanged its labor, operations, maintenance and capital budgets to pay for fuel and debt service.45 PREPA implemented a hiring freeze in 2009, and since 2012 has lost 30% of its workforce.46 PREPA's lack of investment in the maintenance of its system was noted by consultants to the Puerto Rico Energy Commission during its first rate case47 in 2016; those consultants found that "PREPA's generation, transmission and distribution systems are falling apart and reliability is suffering [and] that PREPA is in dire need of a capital infusion: Monetary capital to pay for maintenance and ensure the system is operational; human capital to adequately staff generation and transmission equipment, and intellectual capital to strategically deploy PREPA's limited resources to break out of a cycle of disrepair."48 Despite issuing \$10.1 billion in power revenue bonds from 2002 to 2014, PREPA spent only \$5.76 billion on capital expenditures, as shown in Figure 1.49 Over that same period, PREPA spent \$23.4 billion on fuel, mainly on oil, as shown in Figure 2.50

structure to other representative electric utilities in the area and US; d. Evaluate and recommend whether PREPA and Puerto Rico would be better served, if any part of the fuels function was moved to another area within PREPA or to another government agency; e. Evaluate and recommend different alternatives for an administrative and operational structure..." Siemens was also charged with reviewing the fuels contracting process, fuels handling process and producing a final report. (See contract, pp. 4-6). Siemens pledged to deliver a draft report no later than 35 days after receiving the necessary and available data from PREPA (p. 61). The final report was to be delivered to the Puerto Rico Energy Commission and the Puerto Rico Legislature (p. 42).

⁴⁴ Supplement to Official Statement related to Power Revenue Bonds, Series ZZ and Power Revenue Bonds Series AAA, April 22, 2010 (p. 23); Official Statement Power Revenue Bonds, Series 2012A and Power Revenue Bonds Series 2012B, April 12, 2012 (p. 15); PREPA 2013 Audited Financial Statement; PREPA 2014 Audited Financial Statement.

⁴⁵ The official statement for PREPA's 2012 bond issuance references the increasing reliance on debt to fund operating costs. (See: Official Statement Power Revenue Bonds, Series 2012A and Power Revenue Refunding Bonds, Series 2012B, April 12, 2012). Additionally, of the approximately \$10 billion in bonds issued by PREPA from 2002 to 2013, nearly \$6 billion was used to refund lines of credit or deposited to escrow to pay back previous bond issuances. (See official statements of PREPA power revenue bonds Series KK through 2013A, available online at www.emma.msrb.org, Municipal Securities Rulemaking Board). Given the disrepair of PREPA's physical infrastructure, it is apparent that debt service and the high cost of fuel squeezed out maintenance and investment in the system.

⁴⁶ PREPA 2015 Audited Financial Statement (p. 17); PREPA Certified Fiscal Plan, April 19, 2018, p. 25.

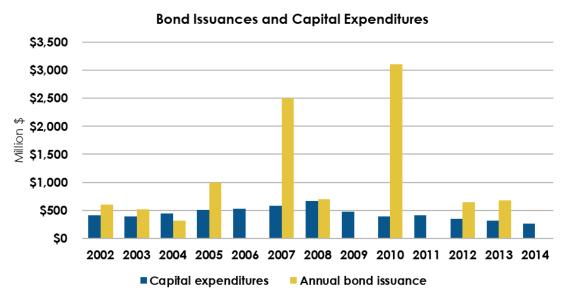
⁴⁷ The Puerto Rico Energy Commission was established by the Puerto Rico Legislature in 2014 as the first-ever attempt to provide professional, independent regulatory oversight over PREPA. The first integrated resource planning proceeding occurred in 2015 and the first rate case in 2016.

⁴⁸ Puerto Rico Energy Commission Case No. CEPR-AP-2015-0001, Expert report of Jeremy Fisher and Ariel Horowitz, November 21, 2016, p. 14.

⁴⁹ See official statements of PREPA power revenue bonds Series KK through 2013A, available online at www.emma.msrb.org (Municipal Securities Rulemaking Board). Capital expenditure data from: Official Statement Power Revenue Refunding Bonds, Series OO, PP and QQ, August 12, 2004; Official Statement Power Revenue Bonds, Series WW, June 18, 2008; Official Statement Power Revenue Bonds, Series 2013, August 15, 2013; and Response to Commission discovery request CEPR-AH-05-10, Case No. CEPR-AP-2015-0001.

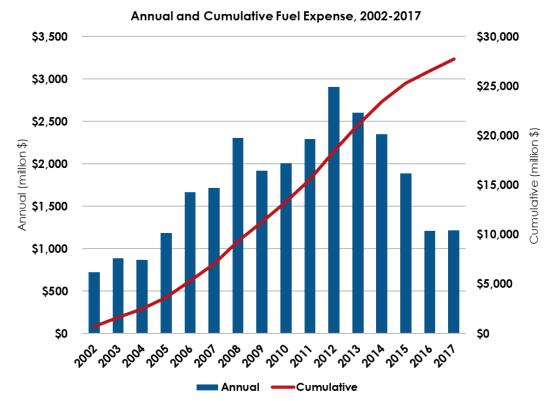
⁵⁰ Fuel costs from: Official Statement Power Revenue Refunding Bonds, Series OO, PP and QQ, August 12, 2004; Official Statement Power Revenue Bonds, Series WW, June 18, 2008; Official Statement Power Revenue Bonds, Series 2012A and Power Revenue Refunding Bonds, Series 2012B, April 12, 2012; PREPA 2012 Audited Financial Statement; PREPA 2014 Audited Financial Statement; PREPA 2015 Audited Financial Statement; and PREPA_June 2017 Monthly Report to the

Figure 1: PREPA's Bond Issuances Far Exceeded the Amount Spent on Capital Improvements to Electrical Infrastructure



Source: IEEFA analysis.

Figure 2: PREPA Spent \$27.7 Billion on Fuel from 2002 to 2017



Source: IEEFA analysis.

Governing Board (unaudited). PREPA's power plants burned exclusively fuel oil until around 2011, when the burners at the Costa Sur plant were converted to co-fire oil and natural gas. (See Official Statement for Power Revenue Bonds Series EEE, December 24, 2010, p. 30).

In 2010, the Puerto Rico Legislature passed a renewable energy law calling for PREPA to achieve 12% of its electricity from renewable energy by 2015.⁵¹ PREPA remains in flagrant violation of this mandate, with only about 2% of its electricity today coming from renewables.⁵²

At the same time, PREPA has been plagued by weak management and political interference that have led to poor budgeting practices and numerous contracting irregularities. These contracting irregularities include renewable energy contracts that the Puerto Rico Energy Commission has found inordinately profited developers;⁵³ a contracting structure for financial consultants on a bond deal whereby the consultants themselves were entrusted with determining the reasonableness of their own fees;⁵⁴ and the notorious Whitefish contract scandal for the rebuild of infrastructure after Hurricane Maria.⁵⁵

PREPA was unable to produce a well-documented budget for its first rate case before the Puerto Rico Energy Commission in 2016, and the commission's consultants noted that the agency's operating budget was "effectively unsupported." In the same case, the commission found that PREPA had underestimated its fuel budget for the subsequent fiscal year by \$461 million — an error that had the effect of creating the appearance of more room in the budget than was actually there to pay for debt service without raising rates. PREPA produced a set of savings initiatives that were largely undocumented and lacking accountability. The upshot was a budget that, by underestimating the revenues needed for the electrical system, mainly served the interests of PREPA's creditors.

The oil fraud, PREPA's overreliance on imported oil, and its history of negligent management are clearly interrelated.⁵⁹ The fraud could not have been perpetuated without a culture of weak oversight and management at PREPA. The negative consequences felt by those who attempted to expose the fraud helped reinforce and strengthen this culture. Similarly, alleged illegal payments in the form of bribes or kickbacks that almost certainly originated from the oil fraud⁶⁰ created a disincentive for managers and executives at PREPA to transition

⁵¹ Puerto Rico Legislature, Act 82-2010, Approved July 19, 2010.

⁵² Data for Fiscal Year 2017 (ending June 30, 2017) available from: PREPA, Monthly Report to the Governing Board, June 2017, p. 1.

⁵³ Puerto Rico Energy Commission Case No. CEPR-AP-2015-0002, Commission Order, September 23, 2016, pp. 59-60.

⁵⁴ Puerto Rico Energy Commission Case No. CEPR-AP-2016-0001, Commission Order, June 21, 2016, paragraph 271.

⁵⁵ A. Davis and S. Mufson, "Puerto Rico's bankrupt utility agreed to pay Whitefish Energy double what linemen make, documents show," Washington Post, November 13, 2017.

⁵⁶ Puerto Rico Energy Commission Case No. CEPR-AP-2015-0001, Expert report of Jeremy Fisher and Ariel Horowitz, November 21, 2016, p. 186

⁵⁷ PREPA had used a fuel price forecast prepared by Siemens. See: Puerto Rico Energy Commission Case No. CEPR-AP-2015-0001, Commission Order, January 10, 2017, pp. 57-59.

⁵⁸ Puerto Rico Energy Commission Case No. CEPR-AP-2015-0001, Commission Order, January 10, 2017, pp. 39-43.

⁵⁹ As explained by PREPA's Chief Restructuring Officer Lisa Donahue in testimony to the Puerto Rico Energy Commission, while she was unable to quantify the costs to ratepayers imposed by political interference and mismanagement of PREPA, "it would be unrealistic to believe there have been no effects." (Puerto Rico Energy Commission Case No. CEPR-AP-2015-0001, Direct Testimony of Lisa Donahue, May 27, 2016, Lines 136-138).

⁶⁰ The third amended class action complaint references a referendum brought by a member of the Puerto Rico House of Representatives alleging kickbacks valued at "over \$100 million." (Third Amended Class Action Complaint, ¶ 74). In addition, the Senate investigation committee noted that it provided documentation to Puerto Rico's Office of Government Ethics that pointed at "possible conflicts of interest with suppliers and possible ethical violations in the organization of the retirement party of engineer William Clark Martínez, past Administrator of PREPA's Fuel Purchasing Office." (Special Commission for the Study of the Standards and Procedures Related to the Purchase and Use of Oil by the Puerto Rico Electric Power Authority and of Government Integrity, Final Report, December 5, 2016, pp. 14-15). Mr. Clark has denied the charges. (M. Williams Walsh, "In scandal at Puerto Rico utility, ex-fuel buyer insists he took no bribes," New York Times, March 2, 2016).

the agency away from oil.

How Concentration of Power and Over-Reliance on Oil Created Conditions Ripe for Fraud

The two main structural deficiencies at PREPA that created conditions for fraud of this magnitude included:

Concentration of power within PREPA's Fuel Office.

One of the fundamental conditions that allowed the fuel fraud to take place was the concentration of power within PREPA's Fuel Office. The Fuel Office set the procurement standards, invited vendors to bid, provided oversight of deliveries, approved quality control certifications, signed off on payment vouchers, conducted reconciliation activity and performance evaluations of the companies under contract. Some of the practices that took place could have been prevented, or exposed earlier, if all of these functions had not all been supervised and carried out by the same unit.

Additionally, a former PREPA board president testified before the Senate that this degree of centralization had occurred in part because of a past PREPA management decision to contract out functions such as the shipping, delivery and storage of fuel. As a result, an oil supplier to PREPA was responsible for purchasing the oil, storing it, transporting it to Puerto Rico, managing the unloading, transporting it in Puerto Rico and delivering it to PREPA's burners. PREPA's only responsibility was testing the oil for quality. The former board president noted further that only a few suppliers were equipped to perform all of these tasks for PREPA and "they all have offices in Houston and they all talk to each other." 61

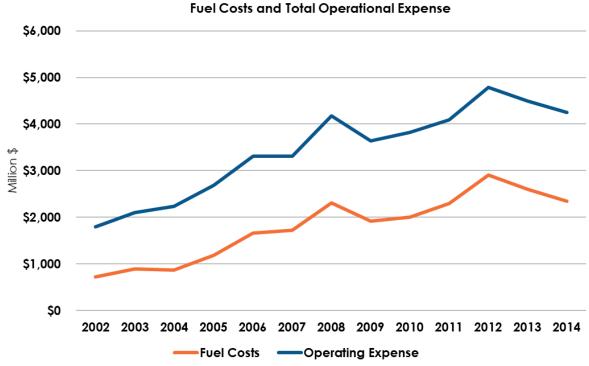
Over-reliance on oil.

Oil is the largest line item in PREPA's budget. For decades, almost all of the generation capacity PREPA owned was oil-fired. PREPA's efforts to diversify beyond oil in the early 2000s (by contracting to purchase power from a natural gas plant and a coal plant) did not reduce the share of PREPA's operating budget going to oil purchases because of a run-up in global oil prices in the late 2000s. From 2002 to 2015, fuel (predominantly oil) accounted for 39-61% of PREPA's total operating expenses. ⁶² As a result, the large-scale contracts needed to supply the volume of oil required by PREPA created the single largest opportunity within PREPA for profiting from fraud.

⁶¹ Special Commission for the Study of the Standards and Procedures Related to the Purchase and Use of Oil by the Puerto Rico Electric Power Authority and of Government Integrity, Final Report, December 5, 2016, p. 92.

⁶² Operating expenses obtained from PREPA 2008, 2011, 2014 and 2015 audited financial statements; Official Statement for Power Revenue Bonds, Series RR and SS, March 24, 2005; Official Statement Power Revenue Refunding Bonds, Series OO, PP and QQ, August 12, 2004; and Official Statement for Power Revenue Bonds, Series TT and UU, April 19, 2007. For source of annual fuel expenditures, see footnote 50 above.

Figure 3: Comprising Between 39 and 61% of PREPA's Operating Budget, Fuel Was by Far PREPA's Largest Operating Expense



Source: IEEFA analysis.

Recent Privatization and Contracting Reforms Fail to Heed Past Lessons

The remaining sections of this report explain the relevance of the fraud to the current debate around PREPA's future.

First, we consider the current initiatives to privatize PREPA and reform contract procedures, which have proceeded without taking into account lessons learned from past fuel fraud.

Second, we consider the potential impact on PREPA's bankruptcy proceeding.

Privatization Opens the Door for More Politically-Driven Contracting Decisions and Deviations from Sound Energy Planning

On June 20, 2018, Gov. Ricardo Rosselló signed a privatization bill designed to allow for a series of contracts for private ownership of power generation and for a private concessionaire to operate the transmission and distribution system. ⁶³ The law authorizes the Puerto Rico Public-Private Partnership Authority (a pre-existing agency) to decide which of PREPA's activities are to be privatized. A committee composed of representatives from

⁶³ R. Slavin, "Puerto Rico governor signs bill for partial privatization of PREPA," The Bond Buyer, June 20, 2018.

PREPA and the Public-Private Partnership Authority are to negotiate the privatization contracts.⁶⁴ The law gives the Puerto Rico Energy Commission a 15-day window in which to approve or disapprove contracts, but does not allow the commission to amend the contract terms.⁶⁵ The Puerto Rico Legislature must approve (or disapprove) any privatization related to power generation.⁶⁶ The Public-Private Partnership Authority is responsible for overseeing the implementation of the contracts, with the assistance of PREPA and the commission.⁶⁷

The act also requires privatization contracts to comply with a yet-to-be-created energy public policy and regulatory framework that the Puerto Rico Legislature will develop within 180 days of passage (i.e. in fall 2018).⁶⁸

Despite PREPA's record, the privatization law is weak on several points:

- It leaves negotiation and enforcement of contracts to the Public-Private Partnership Authority, an entity effectively controlled by the governor, and it includes no indication⁶⁹ as to whether the contracts will prioritize renewable energy—a policy that would move PREPA away from imported fossil fuels and as a result enhance grid resiliency and integrate distributed generation and microgrids.
- It restructures the Puerto Rico Energy Commission, making it a five-member board whose members must meet certain professional qualifications. Commissioners appointed after January 1, 2019, are to be selected from a list submitted to the governor. This follows directives from the Financial Oversight and Management Board, and while this structure is reasonable in theory, in practice it gives the governor unilateral power through 2018 to appoint the majority of the commission, even though the governor has made clear his hostility to the current commission and has failed to prioritize renewable energy in practice.
- It allows privatization contracts to be exempt from compliance with PREPA's official integrated resource plan (IRP) at the recommendation of the partnership committee (controlled by PREPA and the Public-Private Partnership Authority) and with the advice of the Puerto Rico Energy Commission. To Given that the governor would be able to appoint the majority of the commission, it seems likely that the IRP—and any true commitment to sound energy planning—will fall by the wayside.
- It lacks any competitive bidding requirement for the leasing of transmission and distribution-related functions and lacks any requirement that the contract process include a determination by the contracting agency that the vendors chosen meet

⁶⁴ Act 120-2018, June 20, 2018, Section 5.

⁶⁵ Ibid., Section 5(g) and Section 8.

⁶⁶ Ibid., Section 10(c).

⁶⁷ Ibid., Section 8.

⁶⁸ Ibid., Section 9.

⁶⁹ The act contains a provision (Section 5(e)) that requires consideration of "The scope of the proposals to transform the electric system into a modern one; with reasonable rates; with universal access; with efficient and environmentally acceptable energy sources; with an infrastructure that is resistant or resilient, to the maximum extent possible, to the onslaught of atmospheric and natural phenomena." And "The transformation of generation sources in the system to the use of environmentally harmless fuels to the maximum extent possible and with reasonable costs for savings at all rate levels" as part of the bid evaluation process. These "considerations" are not priorities. PREPA's challenge – to remove \$400-\$500 million from its operating budget by investing in renewable energy requires provisions such as these to take on far greater urgency in order to be credible. The difference between a "consideration" and a mandate with benchmarks, specific compliance dates and reporting is obvious.

⁷⁰ Act 120-2018, June 20, 2018.

⁷¹ Ibid., Section 6.

integrity or performance standards: That they do not owe taxes to the Puerto Rico government, for instance, that they have a clean track record with regard to past performance in Puerto Rico, and that they disclose fines and penalties from other jurisdictions and conflicts of interest.

Further Reliance on Imported Fuel

These loopholes in the privatization law leave open the door to transactions that would lock PREPA into continued reliance on centralized fossil fuel generation, preventing a responsible transition to renewable energy and decentralized power generation.

There are clear indications already of what this politically-driven contracting model could look like.

One of the privatization proposals on the table is from a consortium that includes Shell, ITC/Fortis and Kindle Energy that would invest over \$4 billion in a build-out of natural gas infrastructure in Puerto Rico.⁷² This proposal is in line with proposals by Rep. Rob Bishop (R-Utah),⁷³ chair of the U.S. House Committee on Natural Resources, who has been pushing for

Puerto Rico to become a natural gas hub.74

Shell is one of the defendants in the class action lawsuit on the oil fraud. The company, in a joint project with Petrobras, sold \$3 billion in oil to PREPA and was responsible for delivering approximately 60,000 barrels of oil to PREPA every two or three days for at least two years. The Shell is now looking to profit by transforming PREPA into an electricity company that runs on natural gas.

Members of the consortium are represented by the Washington lobbying firm Alpine Group, which also represents Siemens, a key player in Puerto Rico. Siemens developed PREPA's first integrated resource plan, which was rejected by the energy commission, and PREPA rehired the company recently to develop its new plan, a move we have questioned. As a manufacturer of natural gas turbines, Siemens has an interest in promoting natural gas development in Puerto Rico, a conflict of interest noted by the commission in its final order on the first integrated resource plan case. ⁷⁶

The Shell, ITC/Fortis and Kindle proposal flies in the face of both the FOMB-approved PREPA fiscal plan (which found that PREPA's high dependence on fossil fuel imports is financially

⁷² Shell et al., "Specific Plan for the Revitalization of Puerto Rico Energy," June 7, 2018.

⁷³ Congressman Bishop is the Chair of the House Natural Resources Committee with oversight responsibility for Puerto Rico (a United States territory). Congressman Bishop has inserted himself into the debt discussion, going so far as to provide an amicus brief to the bankruptcy judge. The brief argues that the PROMESA law was designed to protect the creditors. The Congressman strongly implies that the current Fiscal Plan approved by the FOMB does not achieve this result and, perhaps the judge should send it back for adjustments. (See: Motion of Congressman Rob Bishop for leave to file brief as amicus curaie, U.S. Court of Appeals for the First Circuit, June 29, 2018.). Congressman Bishop has decided that he disagrees with two important conclusions of the FOMB's certified fiscal plan for PREPA (approved by both PREPA and the Governor): renewable energy must be the top investment priority and PREPA cannot afford any debt service. PROMESA was set up to allow the board to make independent judgements, free from politics. This did not mean only on-Island politics, but also free from the interest group politics that Bishop's support represents. Bishop's demands are political interference of the highest order and would undermine a powerful fiscal consensus, precisely the type and quality of consensus required under PROMESA, that has been developed by the FOMB and Puerto Rico based stakeholders.

⁷⁴ K. Aronoff, "Top Republican plans to use fossil fuels to make Puerto Rico 'the energy hub of the entire Caribbean'," The Intercept, May 5, 2018.

⁷⁵ Third Amended Class Action Complaint, ¶ 25.

⁷⁶ Puerto Rico Energy Commission Case No. CEPR-AP-2015-0002, Final Order, September 23, 2016, p. 37-38.

unsustainable⁷⁷) and the current Puerto Rico Energy Commission-approved Integrated resource plan, which calls for greater reliance on renewable energy. (The privatization law allows for exemptions from the IRP and puts the Puerto Rico Public Private Partnership Authority, not the Financial Oversight and Management Board or the Puerto Rico Energy Commission, in control of contract negotiation and enforcement.)

The privatization law bars any single owner from controlling the generation system, a restriction that precludes the Shell consortium's plan in its current form. But the consortium will likely be able to revise its proposal so that it conforms to the law, which does not prevent the transition to natural gas that these corporations are promoting.

It is also worth noting that the financial advisors to the privatization are Citigroup and Rothschild & Co. Citigroup was part of PREPA's underwriting team for every power revenue bond issuance since 2003.78 PREPA is bankrupt in large part from what appears to be reckless79 borrowing; an investigation by the Commission for the Comprehensive Audit of the Public Credit (a body that Rosselló subsequently disbanded) questioned the diligence of the underwriters on these deals.80 Yet—in another example of apparently politically-driven contracting—the Financial Oversight and Management Board has hired Citigroup back as privatization advisors.

Contract Reforms Implemented at the Direction of FOMB and the Governor Are Insufficient

Independent of the privatization push, the FOMB and the governor have made recent efforts at contracting reform. The FOMB requires anti-bribery language in all future contracts by Puerto Rican agencies and authorities.⁸¹ These provisions have been adopted independent of the governor's office and require follow-up and enforcement protocols, which have not been developed.

The governor's Executive Order 2017-66 to reform PREPA's procurement practices by establishing an Office of Contract Procurement and Compliance (OCPC) within PREPA but controlled by the Puerto Rico Fiscal Agency and Financial Advisory Authority effectively transfers PREPA's procurement contracting to that agency.⁸² PREPA's fiscal plan provides further elaboration on the procurement reforms being carried out under the executive order. Requirements include efficient and compliant procurements, independent reviews and approvals by the OCPC on contracts over \$500,000, and procurement process controls to "mitigate compliance risk, limit potential de-obligation risk and enhance accountability." To our knowledge, this description, which is in PREPA's April 2018 fiscal plan is the only publicly available discussion of OCPC policy.

However, neither Executive Order 2017-66 nor the PREPA fiscal plan specifically acknowledge the need to reform PREPA oil acquisitions. (In the aftermath of the Whitefish scandal, the

⁷⁷ See footnote 1.

⁷⁸ Official statements available via Municipal Securities Rulemaking Board

⁷⁹ The term "reckless" is used herein as it is employed by the United States Securities and Exchange Commission in "Report of investigation in the matter of County of Orange, California as it relates to the conduct of the members of the Board of Supervisors," January 24, 1996.

⁸⁰ Puerto Rico Commission for the Comprehensive Audit of the Public Credit, Pre-Audit Survey Report, 2016.

⁸¹ Financial Oversight and Management Board, "FOMB Policy: Review of Contracts," July 3, 2018.

⁸² Government of Puerto Rico, Executive Order 2017-66, November 8, 2017.

⁸³ PREPA Certified Fiscal Plan, April 19, 2018, p. 14.

executive order does focus on contracting for rebuilding). The two documents lack detail and neither requires the kind of enhanced diligence to prevent fraud in fuel purchases. Neither provides explicit quidance on how to reform and restructure PREPA's Fuel Office.

Publicly available information on the implementation of Executive Order 2017-66 is lacking in several respects:

- OCPC goals presented in the fiscal plan do not acknowledge the need for greater staff professionalism (training in internal controls and ethics, oversight standards, whistleblower protections and cooperation with external auditors), even though PREPA employees seem to have been involved in a rather elaborate fraud.
- They do not acknowledge the need to assess the performance and integrity of vendors to ensure they have a good track record with the Puerto Rico government, even though PREPA has a history doing business with vendors who had pled guilty to corruption and fraud in other jurisdictions, in violation of Puerto Rico law.⁸⁴
- They do not systematically address the many contracting irregularities found in the
 most recent audit by the Puerto Rico Comptroller's Office, in 2017, or the 2016 Senate
 investigation, even though the Senate Investigation included 22 specific
 recommendations for reform directed at PREPA and the 2017 audit included 13
 recommendations.
- They do not include a structural analysis of PREPA's operations to ensure that potentially conflicting operations are not centralized in a single office, particularly the Fuel Office.
- There is no commitment to obvious reforms that would include assurances on competitive bidding— or to contracting at all, given that both the 2002 comptroller's audit and the 2016 Senate investigation faulted the Fuel Office for entering into fueltesting arrangements with laboratories via purchase orders instead of contracts (which the Senate investigation concluded were illegal).⁸⁵
- There is no commitment to greater transparency on the contracting process or to cooperation on a more robust external review process (including audits and studies by government auditors and other outside reviews like those by academic institutions).
 Nor is there a commitment to release reports in a manner that would encourage public discussion and accountability.

PREPA can and should be governed by standards of operational excellence.

Merely avoiding criminality and adverse oversight findings are not sufficient standards for running a public agency.

The "procurement reforms" outlined in the fiscal plan do not even mention any aspect of the Senate investigation. Nor do they reflect any of the serious management issues raised by the comptroller or the consumer class action suit.

⁸⁵ Ibid., p. 4.

⁸⁴ Special Commission for the Study of the Standards and Procedures Related to the Purchase and Use of Oil by the Puerto Rico Electric Power Authority and of Government Integrity, Final Report, December 5, 2016, pp. 5-10.

Because oil procurements still represent over one-third of PREPA's budget, they should be subject to stronger internal vigilance and stricter standards than has historically been the case.

Scandal May Give Bondholders Grounds for Claims in PREPA Bankruptcy Proceedings

The Senate report, class action lawsuit and published audits by the Puerto Rico Comptroller's Office potentially support bondholder claims against the oil suppliers involved in the scheme.

The scheme was found to rely on planning and ongoing participation by representatives of PREPA and to depend as well on laboratories and the oil suppliers cooperating in activities that resulted in PREPA paying for low-quality oil at high-quality prices.

A claim would have to substantiate a theory of loss. Such substantiation could take several forms.

One approach would involve the likelihood that oil refiners might normally charge less money for lower-quality oil products;⁸⁶ had this occurred with PREPA, it would have resulted in lower costs to PREPA. Discounts⁸⁷ offered at the time of oil sales to Puerto Rico for non-compliant oil compared to the price paid by PREPA might be a place to start to explore this possibility.

There's also the possibility that PREPA purchased more oil than it otherwise would have needed to had the oil met actual quality standards. In theory, burning lower-quality oil would produce less energy than compliant oil. Thus, PREPA would have bought more of the deficient product to achieve its planned energy output levels.

Third, burning lower-quality oil may have exacerbated PREPA's non-compliance with air quality standards, causing the agency to incur financial penalties.⁸⁸

Fourth, the use of poorer-quality oil may have caused more wear and tear on PREPA's boilers and generation system.

What's certain is that the oil-purchasing scheme caused PREPA to spend more money on its operations than it otherwise would have. As noted above, PREPA's fuel costs constituted 39% to 61% of its budget from 2002 to 2015. Political pressure to keep rates in check meant that PREPA could not simply pass all of the higher oil costs directly on to its customers, leading to increased stress on PREPA's finances and putting at risk the amount available to pay PREPA's outstanding debt liabilities.

As its economic and financial condition deteriorated, PREPA relied more heavily on debt for operating purposes, ⁸⁹increasing its outstanding indebtedness from \$2.7 billion in the early 1990s to \$9.3 billion today. (See Figure 4, below). It is not clear how much of the debt level was directly or indirectly related to activities that resulted from the oil-overpayment scheme.

⁸⁶ Oil & Gas Journal, "Despite increasing refinery power production, oil-fired generation is declining," July 14, 1997. See discussion on market liberalization.

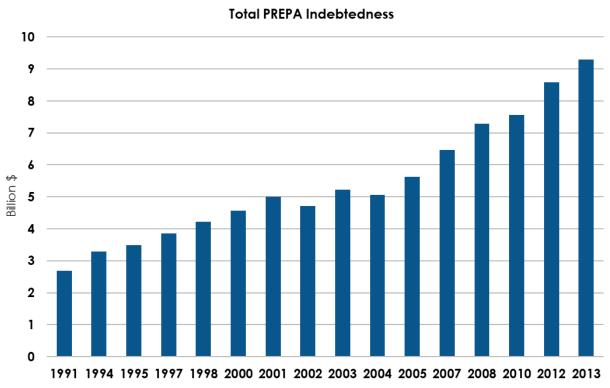
⁸⁷ The World Bank Group, "Predicting Price Differentials Based on Quality," Note Number 275, October 2004.

⁸⁸ The 2002 audit by the Office of the Comptroller noted that irregularities in fuel testing exposed PREPA to greater risk of EPA fines. (Puerto Rico Office of the Comptroller, Audit Report CP-02-26, May 13, 2002, pp. 40-41).

⁸⁹ Supplement to Official Statement related to Power Revenue Bonds, Series ZZ and Power Revenue Bonds Series AAA, April 22, 2010; and Official Statement Power Revenue Bonds, Series 2012A and Power Revenue Bonds Series 2012B, April 12, 2012. See also: Puerto Rico Energy Commission Case No. CEPR-AP-2015-0001, Direct Testimony of Lisa Donahue, May 27, 2016, Lines 186-188.

But PREPA spent approximately \$23 billion for fuel from 2002 to 2014, which suggests the cost to consumers and bondholders could have been more than \$1 billion, as alleged by plaintiff's attorneys in the consumer class action lawsuit.⁹⁰

Figure 4: PREPA's Total Indebtedness Steadily Increased from \$2.7 Billion in the Early 1990s to Over \$9 Billion in 2013



Source: IEEFA analysis.

The scheme contributed to the substantial erosion of PREPA's solvency. Today, PREPA is in bankruptcy. The agency in its FY 2019 budget has allocated zero dollars for debt service and over \$1 billion for oil deliveries.

The oil companies that gained from the scheme described in this report did so at the expense of PREPA's operations and at the expense of its largest source of capital, its bondholders. If successful in establishing a legal claim against the oil suppliers and laboratories who participated in the scheme, bondholders may be able to collect significant damages, including potential treble damages under the federal civil RICO statute.

⁹⁰ While it is clear that PREPA's annual fuel bill would be inflated due to the scheme, the amount that the Authority borrowed during these years in relation to the scheme is less clear. Whatever bond proceeds may have been used to pay oil bills should be accounted for in terms of principal and interest. (See also Hagens Berman, Puerto Rico Electric Power Authority (PREPA), https://www.hbsslaw.com/cases/puerto-rico-electric-power-authority-prepa (last visited July 2, 2018 alleging more than \$1 billion in excess payments to oil suppliers).

Conclusion

PREPA's longstanding overdependence on imported oil is a major reason for why the agency is in physical and financial ruin.

The agency's involvement with the oil industry has been marked by corruption and weak management.

The most prominent example of this problem is in an oil fraud scheme that has triggered a class action lawsuit and may also prove to be an avenue by which PREPA bondholders can seek to recover some of their investment from those who profited from the fraud.

PREPA contracting reforms announced by the governor in late 2017 are overly vague and fail to articulate a coherent set of standards to guide contracting practices at the PREPA Fuel Office. The absence of any serious and publicly transparent effort at reform—on the part of either PREPA or the governor—taints the privatization of PREPA.

The privatization of PREPA also leaves open the door to further politically-driven contracting and more opportunities to perpetuate the system's overdependence on centralized fossil fuel generation. A comprehensive restructuring of the Fuel Office and true reform of PREPA's overall contracting practices are urgently needed. Absent these meaningful actions, the "transformation" of PREPA is unlikely to bring real change for PREPA or its customers.

Appendix: Index of Agencies/Oversight Bodies

Financial Oversight and Management Board (FOMB): Established by Congress in 2016 (PROMESA Act) to assist the commonwealth government achieve fiscal solvency, including approving five-year fiscal plans and budgets for covered agencies, approving restructuring agreements with creditors, and/or allowing covered agencies to file for a bankruptcy-like process under PROMESA.

Puerto Rico Electric Power Authority (PREPA): Established by the Puerto Rico Legislature in 1942 (Act 83-1941) to manage the generation, transmission and distribution of electricity in Puerto Rico. PREPA owns the electricity transmission and distribution systems and part of the generation system, with other generation supplied through long-term contracts.

Puerto Rico Energy Commission (PREC): Established by the Puerto Rico Legislature in 2014 (Act 57-2014) to provide the first-ever regulatory oversight over PREPA.

Puerto Rico Fiscal Agency and Financial Advisory Authority: Established by the Puerto Rico Legislature in 2016 (Act 21-2016), following the bankruptcy of the Government Development Bank of Puerto Rico, to act as fiscal agent, financial advisor and reporting agent for the commonwealth government.

Puerto Rico Public-Private Partnership Authority: Established by the Puerto Rico Legislature in 2009 (Act 29-2009) to facilitate the development of public-private partnerships. The Authority led the privatization of the San Juan airport and two highway projects.

About IEEFA

The Institute for Energy Economics and Financial Analysis conducts research and analyses on financial and economic issues related to energy and the environment. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy. http://ieefa.org

About the Authors Tom Sanzillo

Tom Sanzillo has 30 years of experience in public and private finance, including as a first deputy comptroller of New York State, where he held oversight over a \$156 billion pension fund and \$200 billion in municipal bond programs.

Cathy Kunkel

Cathy Kunkel is an independent consultant with Kunkel Energy Research. She has testified on multiple occasions before the Puerto Rico Energy Commission and other regulatory bodies and was a senior research associate at Lawrence Berkeley National Laboratory. She has undergraduate and master's degrees in physics.

Important Information

This report is for information and educational purposes only. The Institute for Energy Economics and Financial Analysis ("IEEFA") does not provide tax, legal, investment or accounting advice. This report is not intended to provide, and should not be relied on for, tax, legal, investment or accounting advice. Nothing in this report is intended as investment advice, as an offer or solicitation of an offer to buy or sell, or as a recommendation, endorsement, or sponsorship of any security, company, or fund. IEEFA is not responsible for any investment decision made by you. You are responsible for your own investment research and investment decisions. This report is not meant as a general guide to investing, nor as a source of any specific investment recommendation. Unless attributed to others, any opinions expressed are our current opinions only. Certain information presented may have been provided by third parties. IEEFA believes that such third-party information is reliable and has checked public records to verify it wherever possible, but does not guarantee its accuracy, timeliness or completeness; and it is subject to change without notice.