

Appendix I – Excerpts from Commission orders and supporting documents in which the Commission or its consultants have expressed concerns regarding PREPA actions and contracting policies.

(1) Renewables contracts

"In [...] existing contracts, PREPA pays a price for energy, plus a per-megawatt-hour premium that PREPA refers to as "renewable energy credit" (REC). [...] The contractual energy price (*i.e.*, the price without the so-called REC) sufficiently covers the prudent costs of constructing and financing the projects plus a reasonable profit to their owners. The REC premium is therefore in excess of that reasonable profit. [...] [T]here is no evidentiary basis for assuming that a premium, such as that built into PREPA's existing contracts, will be required in future contracts, either by law or by competitive forces. Moreover, even if it were appropriate to assume that PREPA would pay for RECs, PREPA's REC price exceeds that of other United States jurisdictions, despite the absence of a REC market in Puerto Rico."¹

"PREPA has been signing contracts for utility-scale solar facilities at prices comparable to the full retail rates for some classes."²

"The renewable contracts present uncertainty—not due to their prices (which are contractual) but due to their output, because their online dates are difficult to predict. Embodying this uncertainty is a 21% drop (\$30 million), after less than six months, in PREPA's expectations regarding spending on renewable energy contracts."³

"Regarding the prices in existing renewable contracts, the Commission is not suggesting that high prices in existing renewable contracts reflect imprudent actions by PREPA or excess costs to consumers. Windmar argues that contracts signed in 2010-2012 preceded declines in renewable energy equipment, and occurred at a time when high oil prices made such contracts attractive to PREPA. Our point is not that PREPA necessarily should seek to terminate contracts, but to examine whether renegotiations can lower prices and also make operational dates more certain."⁴

(2) Siemens PTI

"PREPA's compliance with our IRP Rule was unsatisfactory. [...] Together with its chief consultant, Siemens Power Technologies International ("Siemens PTI" or

¹ Resolution and Order on PREPA's IRP at ¶¶179-180.

² Expert Report of Paul Chernick, Docket CEPR-AP-2015-0001, at p. 115, fn. 122.

³ Resolution and Order on PREPA's Rates at ¶161.

⁴ *Id.* at fn. 133.

"Siemens"), PREPA disregarded our rules, failed to use standard planning techniques, delayed the production of required information, and displayed insufficient appreciation of the potential for energy efficiency and demand response. These behaviors led PREPA and Siemens to reach conclusions that over-emphasized costly construction, while under-emphasizing the roles of renewable energy technologies and consumer behavior as ways to achieve the energy independence envisioned by Act 57. A related result of this behavior was a proceeding that took many more months, and cost the Commission and consumers many more dollars, than should have been necessary."⁵

"The PREPA IRP was written and constructed almost entirely by Siemens PTI. [...] We infer from these facts, as well as from explicit discussions in the IRP and discovery responses, that numerous decisions and assumptions in the IRP were informed by Siemens rather than PREPA."⁶

"Siemens PTI was familiar with PREPA's system because it had provided transmission planning and renewable integration consulting to PREPA in the past. [...] Siemens PTI is owned by Siemens AG, which is also the parent company of a manufacturer of generating units. A key purpose of an IRP is to determine the need for and type of generating units. The purpose of a least-cost resource planning process is to minimize system costs over the long term. The process must be impartial, relative to the specific resources or manufacturers of generation or demand resources. The typical approach, therefore, describes resource options in generic terms only. While the characteristics of generic resources should be informed by real industry data, a choice of specific manufacturers or project specifications is typically considered only after generic resource choices have been selected; i.e., after the IRP process is concluded. Where the consultant conducting resource planning has a business interest in resource selection, there is risk of bias, intentional or unintentional. That risk rises when the modeling technique used by the consultant involves subjectivity. Given that risk, it is especially important for the utility that hires the consultant to oversee the consultant and inject its own independent judgments. Utility deference to a consultant with a potential for bias is not a prudent practice."⁷

"In this IRP, Siemens was involved in the selection of both methodology and resources – a role especially influential given PREPA's lack of IRP experience. And its analysis did not speak solely in terms of generic units. Rather, it described specific units manufactured by Siemens, along with those of several other companies. PREPA conducted a screening study that included turbines from seven manufacturers, including Alstom, GE, Hitachi, MHI, Rolls-Royce, and Wärtsila, in addition to Siemens. But the thermal resource selection process

⁵ Final Resolution and Order on PREPA's IRP at ¶ 13.

⁶ *Id.* at ¶ 109.

⁷ *Id.* at ¶ 110.

conducted by Siemens PTI reviewed closely only three options: one from GE and two from Siemens technologies.⁸

"We acknowledge that Siemens's witness asserted that the consulting arm of Siemens was "independent" of the manufacturing arm. However, both arms are commonly owned. At a time of deep citizen concern about PREPA's rates and performance, perceptions of bias or favoritism matter. If and when PREPA seeks to purchase new generation equipment, the Commission will require, and will ensure, that PREPA's process for procurement is competitive and objective."⁹

(3) Navigant Consulting

"[M]uch of the crucial work that Navigant has done for PREPA in [the Rate Case] proceeding has been below industry standards. It has caused consultants to incur extra costs to identify errors, get clarification, seek documentary support, and sometimes even to understand the basic outlines of a proposal. Problems include the errors in the average-and-excess computations and the analysis of peak loads. Navigant witnesses have also made claims in testimony and discovery responses that they have been unable to support (such as the claimed benefits of the unbundled rates, or the response that billing determinants were decreased to reflect the residential fuel subsidy). The witnesses' have frequently been unable to identify potential solutions, in such issues as whether coincident peak contributions could be computed in the same manner as non-coincident peaks, or whether multiple monthly peaks could be used for allocating generation costs for a utility in which every month contributes to capacity requirements. They took inconsistent positions between the cost-of-service study and rate design (on such issues as seasonality), and sometimes provided misleading information (such as the suggestion that PREPA had actual monthly NCP data by tariff code).¹⁰

"With regard to cost allocation and rate design, PREPA, the Commission and the public interest have been poorly served by PREPA's consultants. PREPA should take steps to procure more competent assistance from Navigant or other firms, or bring more of this expertise in-house."¹¹

(4) EcoEléctrica¹²

"The EcoEléctrica contract [...] requires an "excess energy payment" for energy required above a 76% capacity factor. EcoEléctrica sets the usage level associated with the 76% capacity factor monthly and sets the excess energy rate weekly.

⁸ *Id.* at ¶ 111.

⁹ *Id.* at ¶ 112.

¹⁰ Chernick Expert Report at § IX.

¹¹ *Id.*

¹² Resolution and Order on PREPA's Rates at ¶¶ 150-153.

These factors make it difficult for PREPA to predict its payments to EcoEléctrica."¹³

(5) Mitsubishi-Hitachi¹⁴ and Alstom Caribe¹⁵

"The San Juan [combined cycle] contract with [Mitsubishi-Hitachi] provides for layers of inspections at multi-year intervals, and can be expected to provide ongoing service for several years. While we do not have evidence that the maintenance contract at San Juan is not currently effective, the contract lacks any form of performance incentive or metrics. The contract appears to insulate the contractor from performance failures as well. While the terms of the contract are considered proprietary, the penalties imposed on the contractor for outage delays do not appear commensurate with the cost of those delays on PREPA."¹⁶

"While the contract requires that Alstom provide a 'permanent on-site operations and maintenance advisor,' and provides a 'technical field advisor' for 'A' and 'B' inspections, the contract does not actually specify the role of the technical field advisor, who leads the inspection and refurbishment process; and, most importantly, who bears responsibility for correctly executed inspections, maintenance, and replacement."¹⁷

"The contract limits Alstom's liability for PREPA staff negligence or deficiencies. Alstom included a contract provision 'exclud[ing] any and all liquidated damages for outage schedule delays, unless such delay is 100% attributable to a negligent act or omission of ALSTOM (*i.e.*, ALSTOM fails to deliver a correct part or make available the required personnel and such late delivery/performance causes an outage delay)."¹⁸

"Since PREPA did not provide a record of forced outages at Cambalache, including any reasons for outages or delays, the Commission's consultants were unable to evaluate Alstom's performance. There was a two-year outage at Cambalache arising from a control system failure that caused an explosion in the turbine."¹⁹

¹³ *Id.* at ¶152.

¹⁴ *Id.* at ¶208.

¹⁵ *Id.* at ¶¶211-218.

¹⁶ Expert Report of Jeremy Fisher and Ariel Horowitz, Docket CEPR-AP-2015-0001 at § V(C)(6)(b)(ii).

¹⁷ Resolution and Order on PREPA's Rates at ¶215.

¹⁸ *Id.* at ¶216.

¹⁹ *Id.* at ¶217.

"[T]he Cambalache contract has no performance incentives or penalties to keep the units in operation or in a state of good repair. Alstom's liabilities are limited to a small fraction of the cost of the contract."²⁰

"The contract recognizes that Alstom relies on PREPA staff for much of the execution of maintenance, and specifically seeks to reduce Alstom's liability for PREPA staff negligence or deficiencies."²¹

(6) Excelerate and Aguirre Offshore Gasport, LLC²²

"The Time Charter agreement, a contract to hire Excelerate's FRSU for fifteen years, requires a daily fixed payment of \$111,500, or \$40.7 million per year, and includes substantial liquidated damages to withdraw from the agreement once authorized. The contract contains a "hell or high water" provision, requiring that PREPA pay for the hire of the FRSU "without regard to (i) the amount of LNG delivered to EE for Regasification, (ii) whether or not LNG deliveries are actually made by PREPA or (iii) whether or not PREPA is able to receive or requires the use of Natural Gas from or beyond the Shore-side Natural Gas Delivery Point." This contract represents a substantial—and nearly irrevocable—investment that is otherwise not disclosed by PREPA in filing this rate case."²³

The Commission's Final Resolution and Order on PREPA's IRP and Final Resolution and Order on PREPA's Rates, as well as the expert reports filed by the Commission's consultants, are available in full at the Commission website, energia.pr.gov or upon request to the Commission Clerk's Office at 787-523-6262.

²⁰ *Id.* at ¶218.

²¹ Fisher and Horowitz Expert Report at § V(C)(7)(a)(i).

²² *Id.* at § V(D)(3).

²³ *Id.* at § V(D)(3)(b)(ii).