

July 22, 2016

VIA ELECTRONIC MAIL:

n-ayala@aeepr.com; c-aquino@aeepr.com

Ms. Nélida Ayala Jiménez General Counsel Puerto Rico Electric Power Authority (PREPA) PO Box 363928 San Juan, PR 00936-3928

Re: *In re:* Review of Rates of the Puerto Rico Electric Power Authority, No. CEPR-AP-2015-0001; 5th Requirement of Information (Amended)

Dear Ms. Ayala,

Pursuant to the provisions in Article VIII of Regulation No. 8543, known as the Regulation on Adjudicative, Notice of Noncompliance, Rate Review and Investigation Proceedings (Regulation 8543), the staff of the Puerto Energy Commission (Commission Staff) is conducting discovery in the matter *In re:* Review of Rates of the Puerto Rico Electric Power Authority, No. CEPR-AP-2015-0001.

Through this letter, the Commission Staff issues its third round of requirements of information. PREPA shall submit, **on or before August 5th, 2016**, the information, data or documents, as appropriate, in digital format, required herein. PREPA shall submit such information, data or documents in accordance with the following instructions:

I. Instructions

A. In General

- 1. Unless the context requires otherwise, all words used in the singular shall be deemed to also include the plural.
- 2. Responses to questions must be made in writing, separately and under oath. Questions should be answered by supplying any information which PREPA has knowledge of or information obtained by their representatives, employees, contractors, agents or representatives, or

- as a result of any investigation conducted. Each response shall state the person responsible for that response.
- 3. When production of a document is required, the response should identify the document produced, the format or formats in which the document was produced, and the method and date it was delivered to the Commission Staff. The identification of the document shall include: the name or title of the document, the document date, and the name of its author.
- 4. If information, data or documents required for any requirement do not exist, the person to whom this request for information is directed shall so specify in his or her reply to that request.
- 5. Except where the context indicates otherwise, the term "any" includes "all," and vice versa.
- 6. PREPA shall have a continuing duty to update, correct or amend its answers and notify the Commission Staff of any additional information obtained after said request and which is the subject of this requirement of information.
- 7. For purposes of this requirement of information, the term "document" means any material, no matter the form, type, nature or description, whether electronic, handwritten or typed, printed, engraved, photographed or copied, and no matter by whom it was originated, prepared, produced, reproduced, published or disseminated. The term "document" includes all types of publications, reports, magazines, books, pamphlets, brochures, folders, records, and/or volume set of attached or unattached papers.
- 8. For purposes of this requirement of information, the term "information" includes data and documents.
- 9. Digital Format: **All documents must be submitted in the Word or searchable PDF format**. Analyses prepared using an electronic spreadsheet program such as Excel will be provided in native format with formulas and cross-references intact. Under no circumstances may a printed document, scanned and converted to an image in Personal Document Format (PDF), be presented if there is already a version in digital text. In view of this, the presentation of PDF images of documents that were originally produced in digital text will not be allowed. The presentation of PDF images will only be allowed for those documents that do not exist in a digital version, or for which PREPA does not have a digital version.

- 10. If PREPA finds it necessary to request an extension of time for the production of part of the required information, it shall do so in writing and submit its request to the Commission's Staff on or before *August 5th*, *2016*. In its request, PREPA shall state the efforts undertaken thus far in order to produce the required information, and the reasons pursuant to which it will not be able to produce it within the original period, and which, according to PREPA, justify the granting of the requested extension, along with the specific date by which PREPA commits to provide a full response. However, on or before *August 5th*, *2016*, PREPA shall produce all the required information that, up until that date, it has been diligently able to obtain, organize, and process in accordance with the instructions established in this letter.
- 11. Although PREPA is generally required to inform the Commission of any change or amendment to any information or documentation provided as part of an information requirement, the Commission calls PREPA's attention to the questions included in Part II.D of this request. PREPA shall treat such questions as a continuing request and shall update any of its answers to such questions as soon as feasibly possible from the date in which such change is known to PREPA.

B. Allegedly Confidential or Privileged Information and Documents

The Commission Staff recognizes that PREPA may assert that some of the documents responsive to these questions warrant confidential treatment. Section 1.15 of Regulation No. 8543, together with the provisions of Articles 1.4 and 6.15 of Act 57-2014, as amended, govern the information that may be unavailable for public access because it is privileged or confidential, as well as the general guidelines for the Commission to determine what information is privileged and confidential and the treatment to be given to protect such information.

Specifically, Section 1.15 of Regulation 8543 provides that when a person has the duty to submit to the Commission information that, in his or her view is privileged or confidential, that person shall (i) identify the information which he or she considers to be privileged or confidential, (ii) request the Commission to protect this information, and (iii) state in writing the arguments in support of his or her request for protection. Once the matter is submitted to the Commission, it shall proceed as provided in Article 6.15 of Act 57-2014 if the Commission determines that the information produced and identified deserves protection.

With this background, if any of the requirements of information require PREPA to submit information it understands is confidential or privileged, the following instructions shall be observed:

1. When submitting the information, PREPA shall (i) mark or identify the information as "confidential" or "privileged"; and "(ii) identify the reason

why the document or information should be classified as "confidential" or "privileged".

- 2. Along with the filing, PREPA shall submit a memorandum of law stating in writing the legal basis and sources to support its argument that the information or documents identified should be classified as "confidential" or "privileged". In its memorandum, PREPA must connect each claim to a particular document or piece of information.¹ PREPA shall serve a copy of its memorandum of law to the intervenors currently participating in the proceeding.
- 3. Except for communications covered by attorney-client privilege, PREPA cannot fail to submit any information or document to the Commission on the grounds that it believes it is a confidential or privileged document or information. If PREPA claims that the information is attorney-client privileged, it must state the basis for this claim and affirmatively state that there is no other alternative way for PREPA to provide the information that would not be attorney-client privileged.
- 4. The Commission Staff will protect and maintain secure any and all information marked by PREPA as "confidential" or "privileged" unless the Commission rules otherwise.

C. Questions regarding the Requirements

If PREPA has any question regarding any of the requirements of information made in this letter, it shall state its question or need for clarification in writing and submit it by electronic mail to the Commission Staff. While PREPA and the Commission Staff may have verbal discussions about PREPA's questions for efficiency purposes, all final questions and answers must be stated in writing. Verbal expressions and discussions about PREPA's questions will have no evidentiary value or effect.

II. Requirements of Information

Please provide responses to the following questions by **August 5, 2016**.

- A. Questions for Witness Zarumba and Granovsky (Z/G). Generally, please refer to PREPA Ex. 8.0 and documents attached thereto.
- 1. CEPR-PC-02-01: Please explain why Navigant implemented the Average and Excess Allocation Factor in the manner shown in sheet G-5c of the workbook

¹ When handling "confidential" or "privileged" information, the Commission Staff will observe all the applicable rules from the *Normas Internas para el Manejo de Información Confidencial en la Comisión de Energía de Puerto Rico*. See, http://energia.pr.gov/wp-content/uploads/2015/05/201505121415 06478.pdf

- "Sch. G-1, G-2 (Workbook)," rather than as shown in Table 4-10A of the NARUC Electric Utility Cost Allocation Manual (January 1992), including Navigant's rationale for each deviation.
- 2. CEPR-PC-02-02: Please explain why Navigant included each of the following elements in its derivation of the Average and Excess Allocation Factor in the manner shown in sheets G-5c and Calc-1 of the workbook "Sch. G-1, G-2 (Workbook)":
 - a. Computing the average load (sheet Calc-1) as sales ÷ (class annual load factor × hours), rather than sales ÷ hours.
 - b. Increasing excess demand, but not average demand, by the ratio of gross to net generation at PREPA power plants.
 - c. Computing "Average & Excess Demand after Correction" as the sum of "Average Demand after Loss Adjustment" and "Excess Demand after Adjustment," rather than weighting those demands, respectively, by system load factor and (1 system load factor).
 - d. Computing the AED allocator from the class average MW and excess MW, rather than the class share of average MW and the class share of excess MW.
- 3. CEPR-PC-02-03: Please provide the rationale for allocating generation plant on A&E Demand.
- 4. CEPR-PC-02-04: Since according to Ex. 4.0, pp. 22–23, the evidence for seasonal and TOU rates is currently "not compelling," please indicate whether Navigant has considered assigning generation and transmission using a broader demand allocator, such as 12CP or average annual demand in on-peak hours.
 - a. Explain why or why not.
- 5. CEPR-PC-02-05: Ex. 4.0, p. 17, indicates that the shortest seasonal peak period would be the five months June–October.
 - a. Why does the Calc-1 tab of Schedule G-1 include tariff-code peaks outside that period?
 - b. What difference does a class's peak load in November or February make to PREPA's generation cost?

- 6. CEPR-PC-02-06: Please indicate whether class NCP alone is an appropriate allocator for generation plant.
 - a. If so, explain why.
 - b. If not, explain why not.
- 7. CEPR-PC-02-07: Please explain why the Sch. G-1, G-2 workbook uses the same loss factor (within each class) for energy as for peak demand.
- 8. CEPR-PC-02-08: Please provide the derivation of the loss factors by voltage level in sheet Input-7 of the Sch. G-1, G-2 workbook.
- 9. CEPR-PC-02-09: Please provide the derivation and work-papers of the losses shown in "Table A-1: Estimate of Technical and Non-Technical Loss" of PREPA's "Integrated Resource Plan Volume III: Demand and Fuel Forecasts and Demand Side Management."
- 10. CEPR-PC-02-010: Please reconcile the loss factors used in sheet Input-7 of the Sch. G-1, G-2 workbook with "Table A-1: Estimate of Technical and Non-Technical Loss" of IRP Volume III.
- 11. CEPR-PC-02-011: Please explain how PREPA estimates its technical energy losses in transmission and distribution.
- 12. CEPR-PC-02-012: Please explain why the "labor ratio, plant in service ratios, metering costs, purchased power classification percentage and efficiency by voltage level" are unlikely to change from 2014 to 2017, as stated in Ex. 8.0, pp. 7–8.
- 13. CEPR-PC-02-013: Please specify all costs associated with air-pollution control included in the ECOSS, and for each provide the following information:
 - a. Indicate where these costs are classified and allocated in the ECOSS.
 - b. Explain whether Navigant considers these costs to be demand-related or energy-related.
- 14. CEPR-PC-02-014: Regarding the fuel conversion of oil plants to gas, please provide the following information:
 - a. Specify any costs associated with this project that are included in the ECOSS.
 - b. Indicate where these costs are classified and allocated in the ECOSS.

- c. Explain whether Navigant considers these costs to be demand-related or energy-related.
- 15. CEPR-PC-02-015: Please provide the following data for each month from January 2013 to the present:
 - a. The monthly system peak in MW.
 - b. The time and date of the monthly peak.
- 16. CEPR-PC-02-016: Please define "Average Demand" as the term is used in PREPA Ex. 8.0, p. 18, ll. 315–316.
 - a. Specifically, is this the annual energy divided by 8,760, or some other computation?
 - b. Please explain how and why load factors are applied to the energy sales.
 - c. Please explain why "tariff-specific load factors" are applied to the energy sales.
 - d. Please provide any authority or reference that defines "Average Demand" in the manner used in the PREPA cost-of-service study.
- 17. CEPR-PC-02-017: Please provide the derivation of the annual load factors that are inputs to Sch. G-1, G-2.xlsx, as shown in Tabs Input-1, row 17 and Calc-1, row 66.
- 18. CEPR-PC-02-018: Please provide the time and date of the monthly NCP for each tariff code for each month provided in the ECOSS (Schedule G-1, G-2.xlsx, Tab "Input-1").
- 19. CEPR-PC-02-019: Please provide the most recent load research study for each PREPA tariff code.
- 20. CEPR-PC-02-020: Please provide all hourly load-research data used in constructing lines 14–25 of Tab I-5 of "PREPA Ex. 4.0 WP 1 (Billing Determinants).xlsx."
- 21. CEPR-PC-02-021: For each sample listed as a data source in Tab I-5 of "PREPA Ex. 4.0 WP 1 (Billing Determinants).xlsx," please provide the 8,760-hour load shape computed for each sample for the most recent available year.
- 22. CEPR-PC-02-022: Regarding the load-research data relied upon in the ECOSS, please provide the following information for each tariff code the number of customers in each rate class that are hourly-metered.

- 23. CEPR-PC-02-023: Please explain why the hourly load data collected by PREPA's MV90 was an adequate basis for the class NCP allocator, but not for class coincident peaks (as stated in PREPA Ex. 8.0, p. 16).
- 24. CEPR-PC-02-024: Please provide an estimate of the percentage of the class NCP contributed by MV90 metered customers.
 - a. Provide the basis of this estimate, including all data, assumptions, calculations, and work-papers relied upon.
- 25. CEPR-PC-02-025: Please provide a map of PREPA's transmission system, identifying each substation.
- 26. CEPR-PC-02-026: Please list the transmission facilities that are required primarily to connect one or more generators to the transmission system, and the cost of those facilities.
- 27. CEPR-PC-02-027: For each leg of the transmission system, please provide the monthly peaks for the period January 2013 through the present, and the date and time of each.
- 28. CEPR-PC-02-028: Please provide a list of PREPA substations, including for each:
 - a. Station name.
 - b. Number of transformers,
 - c. MVA of transformers,
 - d. High-side and low-side nominal voltages,
 - e. the peak loads on the substation in 2013, 2014, and 2015,
 - f. Time and date of the 2013, 2014 and 2015 peak loads on the substation.
 - g. Load, date and time of the monthly peak on the substation, for each month from June 2014 to the present.
- 29. CEPR-PC-02-029: For each distribution substation,
 - a. Please indicate whether the substation serves exclusively one class, and if so, which class.
 - b. If the substation serves more than one class, please provide any data or estimates available on the mix of class load on that substation.

- c. If the substation serves more than one class, please provide any data or estimates available on the load of each class at the time of the substation peak load.
- 30. CEPR-PC-02-030: Please provide a list of PREPA's feeders, with the following data for each:
 - a. The voltage of the feeder.
 - b. The capacity of the feeder under peak conditions.
 - c. The number of customers on the feeder.
 - d. The peak loads on the feeder in 2013, 2014, and 2015.
 - e. The date and time of the peak load on the feeder in 2013, 2014, and 2015.
 - f. Any data or estimates available to PREPA on the mix of class load on the feeder
 - g. Any data or estimates available on the load of each class at the time of the feeder peak.
 - h. The substation from which the feeder is normally served.
 - i. Any substation from which the feed can be served under contingency conditions.
- 31. CEPR-PC-02-031: Please provide all data, analyses, and work-papers informing the "subjective determination" on which the separation of distribution plant (other than line transformers) into 59.5% primary and 40.5% secondary was based.
- 32. CEPR-PC-02-032: Please provide all material, including memos, work-papers, notes of meetings, that Navigant received from the PREPA planning department regarding the separation of distribution plant into primary and secondary.
 - a. Please provide the names and titles of the PREPA staff who provided information to Navigant regarding the separation of distribution into primary and secondary.
- 33. CEPR-PC-02-033: Please provide Navigant's and PREPA's justification for functionalizing a portion of Station Equipment to the Secondary-Only function.

- 34. CEPR-PC-02-034: Please provide estimates of the following, including all supporting data and analyses:
 - a. The percentage of distribution poles that carry only primary lines;
 - b. The percentage of distribution poles that carry only secondary lines;
 - c. The percentage of distribution poles that carry both primary and secondary lines.
 - d. The reduction in the cost of a pole currently supporting both primary and secondary lines if the secondary lines were not required.
 - e. The increase in the cost of a pole that now supports only primary lines, if PREPA were to use it to support secondary lines.
- 35. CEPR-PC-02-035: Please provide any data available to PREPA regarding the number of feet of overhead cable and wire in service, by type (e.g., copper, ACSR) and size (i.e., gauge or diameter).
- 36. CEPR-PC-02-036: Please explain how the number or cost of poles changes as customers are added along a street with existing electric service.
- 37. CEPR-PC-02-037: Please indicate the percentage of poles that would have been avoided if half the customers along an overhead primary feeder (e.g., every second customer) had never existed.
- 38. CEPR-PC-02-038: Please indicate whether the PREPA distribution system contains distribution networks, e.g., in urban areas.
- 39. CEPR-PC-02-039: Please provide a map of PREPA's distribution system map, showing location of feeders and line transformers.
 - a. If this information is not readily available as images, please provide access for the Commission to this information through PREPA's GIS or mapping system.
- 40. CEPR-PC-02-040: Please provide circuit maps or diagrams for all PREPA distribution circuits, showing each pole, transformer and customer connection.
 - a. If this information is not readily available as images, please provide access for the Commission to this information through PREPA's GIS or mapping system.
- 41. CEPR-PC-02-041: Please provide all of PREPA's distribution planning and construction guidelines, rules, handbooks, or other materials guiding designers and field staff in selecting distribution equipment topology, including but not

- limited to the height of poles, the arrangement of equipment along the poles, the sizing of conductor, the requirements for messenger wire, and acceptable length of secondary runs.
- 42. CEPR-PC-02-042: Please provide any data on the percentages of PREPA's primary distribution system that are single-phase, two-phase, and three-phase.
- 43. CEPR-PC-02-043: Please provide any data on the percentages of PREPA's secondary distribution that are single-phase, two-phase, and three-phase.
- 44. CEPR-PC-02-044: Please provide any data available to PREPA regarding the average number of feet of conductor in a service drop, by type (e.g., copper, ACSR), size (i.e., gauge or diameter), and rate class.
- 45. CEPR-PC-02-045: Please explain whether the allocator for service drop costs accounts for the percentage of customers who share service drops.
- 46. CEPR-PC-02-046: Please explain whether PREPA typically serves a multifamily building with a single service, or with a separate service for each customer.
- 47. CEPR-PC-02-047: Please provide any information available to PREPA on the number of services by class, reflecting the sharing of services by small customers in a multi-customer building.
- 48. CEPR-PC-02-048: Please provide PREPA's estimate of the percentage of its customers by rate class who are in multi-family buildings.
- 49. CEPR-PC-02-049: Please provide:
 - a. the total number of service drops at year-end FY 2014, and
 - b. the number of residential service drops at year-end FY 2014.
- 50. CEPR-PC-02-050: Please provide the justification for using relative meter costs as a proxy for the variation among tariff classes of all other customer-related costs.
- 51. CEPR-PC-02-051: For each Administrative and General Expenses account, separately, please provide Navigant's justification for functionalizing that account on labor, as shown in Sch. G-1, G-2.xlsx, Tab Calc-3.1a.
- 52. CEPR-PC-02-052: Please indicate whether some A&G expenses are related to plant, such as insurance and finance.
 - a. Explain why or why not.

- 53. CEPR-PC-02-053: Please explain what factors drive PREPA's legal expenses.
- 54. CEPR-PC-02-054: Please provide Navigant's justification for functionalizing CILT as 100% distribution-related (as shown in Sch. G-1, G-2.xlsx, Tab Calc-3.1a).
- 55. CEPR-PC-02-055: Please provide Navigant's justification for functionalizing CILT as 100% distribution-related (as shown in Sch. G-1, G-2.xlsx, Tab Calc-3.1a).
- 56. CEPR-PC-02-056: For each Administrative and General Expenses account, separately, please provide Navigant's justification for classifying that account based on labor, as shown in Sch. G-1, G-2.xlsx, Tab Calc-3.1b.
- 57. CEPR-PC-02-057: Please provide Navigant's justification for classifying the Energy Commission Assessment as 100% customer-related (as shown in Sch. G-1, G-2.xlsx, Tab Calc-3.1b) and allocating that cost on the Client allocator (Sch. G-1, G-2.xlsx, Tab 5.1)
- 58. CEPR-PC-02-058: Please explain the derivation and use of the "Energy Supporting Public Lighting" allocator employed in Sch. G-1, G-2.xlsx, Tab Calc-5.1.
 - B. Questions for Witness Zarumba and Granovsky (Z/G). Generally, please refer to PREPA Ex. 4.0 and documents attached thereto.
- 1. CEPR-PC-03-01: Referring to the list of additional attachments listed on Page 2 (Zarumba, Granovsky) and supplemental to CEPR-PC-01-02, please identify or provide working papers, schedules and calculations for each sub-schedule:
 - a. H-1a, H-1b
 - b. H-4a, H4b, H4c, H4d, H4e, H4f, H4g, H4h, H4i
- 2. CEPR-PC-03-02: The following questions refer to the revenue requirement allocation process as described by Zarumba and Granosvksy, step 4 "Eliminate any Decreases Justified by the Embedded Cost of Service." (Ex. 4.0, p. 25):
 - a. Please explain the following sentence "If any classes required a decrease in overall rates those decreases were eliminated."
 - i) Identify the classes by tariff where the ECOSS resulted in a rate decrease.
 - ii) How were the decreases eliminated?
 - iii) Identify any supporting working papers or Schedules.

- iv) Please explain how the eliminated rate decreases were "allocated by kWh" to the other classes and flowed through the revenue requirements allocation.
- 3. CEPR-PC-03-03: The following questions are in reference to the benefits of unbundling as discussed by Messrs. Zarumba and Granovsky on page 28 of Ex. 4.0. Specifically, the two benefits cited are improved price signals (\$/kWh) to consumers and reduction in cross-subsidization.
 - a. Please explain how unbundling transmission services from generation will improve the price signals to residential customers compared to the rate structure currently in place for residential customers.
 - b. Do witnesses Zarumba and Granovsky agree that there are alternative rate design mechanisms that will improve price signals to customers so the "customer can make informed decisions about consuming one more or less of a component of electric service"?
 - i. Please explain how unbundling is a superior approach to time-ofuse or peak pricing (TOU) on a dollar per kilowatt hour basis.
 - ii. Please explain how unbundling is a superior approach to inclining block rate design (\$/kWh).
- 4. CEPR-PC-03-04: Please provide a detailed description how unbundling rates reduces cross-subsidization (Ex. 4.0, p. 28) and address the following in your response:
 - a. Are the cross-subsidization reductions referring to inter-class or intraclass reductions?
 - b. How does an unbundled tariff reduce cross-subsidization compared to a bundled tariff?
 - c. Please explain the reduction in cross-subsidization resulting from unbundling transmission services from generation for non-transmission taking customers.
- 5. CEPR-PC-03-05: Please confirm that all renewable net metering customers are also DER customers. If this is not true, please explain when renewable net metering customers are considered DER customers.
- 6. CEPR-PC-03-06: Referencing Schedule G-1/G-2, please indicate for each tariff rate class the total number of 1) solar or renewable net metering customers and 2) non-renewable net metering customers:

- a. LRS 109, 110 (NM)
- b. GRS 111, 112 (NM)
- c. GSS 211, 311 (NM)
- d. GSP 212 (NM)
- e. GST 213 (NM)
- f. GAS 711 (NM)
- g. PLG 423 (NM)
- 7. CEPR-PC-03-07: Please identify the marginal cost study testimony (PREPA Ex.9.0) sponsored by Mr. Shlatz. (as reference in Ex. 4.0, p. 32)
 - a. Please explain the roles of Messrs. Zarumba, Shlatz, and Granovsky in the development of PREPA Ex. 9.0.
- 8. CEPR-PC-03-08: The following questions reference the avoided cost discussion in Ex. 4.0, pp. 34–35:
 - a. Please reference and provide the language from the Public Utilities Regulatory Policy Act of 1978 ("PURPA") which require Qualifying Facilities (QF) to be paid avoided costs.
 - b. Please clarify if PURPA prevents a state regulatory authority from establishing rates for QF purchase that higher than avoided costs.
 - c. Is it the understanding of Messrs. Zarumba and Granovsky that the minimum rate allowed by PURPA for power purchased from QFs is the full avoided cost?
 - d. Please explain whether Messrs. Zarumba and Granovsky (Ex. 4.0, line 538) propose that DER "be paid avoided costs" for the power delivered to PREPA in excess of the customer's hourly load, for all power generated by the DER, or something else?
 - e. Ex. 4.0, line 540, refers to the computation of "marginal costs...for a high load-factor customer." Does this reference imply that the witnesses believe that the host customer's load factor affects the avoided costs from DER?
 - f. If so, please explain the difference in avoided costs for a particular DER load shape, between a customer with a low load factor versus one with a high load factor.

- g. Please provide a sample avoided cost calculation for a renewable NEM customer with a load factor of .65.
- 9. CEPR-PC-03-09: In reference to the Base Rate Pricing Design detailed in Schedules H-2 and H-3 and the alternative rate design provided in Schedule N-1 (Ex. 4.0, p. 38), please provide the following:
 - a. Please explain the differences between the base rate pricing design and the alternative rate design.
 - i. Confirm if the transition charge has been included in the revenue requirements.
 - ii. Explain which work-paper(s) contain the calculations for the base rate design.
 - iii. Please confirm whether the reference to Schedule N-1 is to "Sch. N-1(Workbook)."
- 10. CEPR-PC-03-010: Referring to the Schedules M-1, M-2, M-3 and N-1, please describe the differences among these workbooks. In particular, explain which of these workbooks do each of the following:
 - a. Represent PREPA's proposal.
 - b. Vary fixed charges from PREPA's proposed levels.
 - c. Assume that the restructuring does not occur.
- 11. CEPR-PC-03-011: Referring to the tariff update process discussion on pages Ex. 4.0, pp. 38–40, please provide the following information:
 - a. Please confirm if item 5 on page 39 should be changed to item 1 or if items 1-4 are missing.
 - i. If items 1-4 are missing, please provide them.
 - b. Please provide or identify any analysis or working papers used in the process to update the tariffs, specifically:
 - i. Review of existing tariff structures to determine revenue sufficiency for the tariff and each tariff code.
 - ii. Comparison of revenues produced by each tariff with the results of the ECOSS study.
 - iii. Information from the MEC study used to provide information on the economic cost to serving customers.

- 12. CEPR-PC-03-012: With regard to the statement that "We did not adopt this concept for rate design," (Ex. 4.0, line 692), please explain:
 - a. What concept was not adopted for rate design.
 - b. Why that concept was adopted for the transition charge and not for rate design.
- 13. CEPR-PC-03-013: Please identify the residential tariff codes that PREPA treats as containing subsidy tariffs.
 - a. Please explain what portion of the rate is subsidized.
 - b. How is the subsidized the rate recovered from other classes?
 - c. Please clarify which tariff codes are considered to be "lifeline classes."
 - i. Indicate which of the tariff classes considered a lifeline class are exempted from the subsidy charge in the proposed rates.
- 14. CEPR-PC-03-014: Please explain for tariff codes RH3 103 and RH3 104, how energy will be charged for a customer consuming 400 kWh in all months, except for 500 kWh in June. Please address the following:
 - a. Will the customer be charged for the first 425 kWh at the RH3 103 tariff rate, and at the RH3 104 rate for the remaining 75kWh? If this is not the case:
 - i. Will the customer be charged for the entire 500 kWh at the RH3 104 tariff rate?
 - b. If the same customer from the example above uses 400 kWh in July will this customer again be charged the RH3 103 rate?
 - c. Please explain whether there are any circumstances that would result in transfer of an RH3 customer to the GRS tariff rate.
- 15. CEPR-PC-03-015: Referring to the proposed Tariff LRS design discussion on p. 44 (Ex 4.0) for tariff codes LRS 110 and LRS 109, please describe how PREPA determines which tariff code an LRS customer will be assigned for the purposes of reporting sales and revenues by tariff code, as in the COSS (Schedule G) and Schedule H.
 - a. Is each customer assigned to a rate code each month based on its consumption in that month? Or based on its average consumption over the previous year? Or some other criteria?

- b. If an LRS customer uses 500 kWh in a month, is the bill for that month based on the first-block rate for 425 kWh plus the second-block rate for 75 kWh, or the second-block rate for 500 kWh?
- 16. CEPR-PC-03-016: Please list the tariff codes that the witnesses consider to be lifeline tariffs, as that term is used on line 764.
- 17. CEPR-PC-03-017: Please explain why inverted block rate design is appropriate for LRS and RH3 customers "because it would be undesirable to offer a discount for unlimited usage." (p. 43,44).
 - a. Do the witnesses believe that an inverted rate design will provide pricing signals to customer to conserve energy.
 - b. Please explain when an inverted rate design is an appropriate rate design to discourage energy consumption.
- 18. CEPR-PC-03-018: Please explain why inverted block rate design is not appropriate for GRS customers and "No rationale exists for the inverted energy charge. (p. 41)"
 - a. Why should inclining block rates not be priced above bundled marginal costs?
 - b. Are there instances when inclining block rates should be priced above the bundled marginal energy cost?
- 19. CEPR-PC-03-019: Please provide the following monthly data for GRS customers for each month, 2013–2015:
 - a. GRS 111 energy consumption.
 - b. GRS 112 energy consumption.
 - c. Energy consumption by the GRS 111 load-research sample.
 - d. Energy consumption by the GRS 112 load-research sample.
 - e. Contribution to the monthly system peak load by the GRS 111 load-research sample.
 - f. Contribution to the monthly system peak load by the GRS 112 load-research sample.
- 20. CEPR-PC-03-020: Please explain how the witnesses believe the fixed charge for GRS customers should be determined (lines 734–735).

- 21. CEPR-PC-03-021: Referring to the Ex. 4.0, p. 47, "Tariff GSS is serving an overly broad group of customers. An Argument exists for it to be broken into multiple tariffs":
 - a. Please explain what is meant by "an overly broad group of customers"?
 - b. Please explain why breaking the GSS tariff into multiple tariffs would be preferable.
 - c. Please explain which types of additional tariffs should be split off from tariff GSS (e.g., rates including different energy charges, demand charges, TOU charges) and how the rates might be split (e.g., by energy use, peak demand, number of phases of service, end use).
 - d. Please specify the "information [that] is not available at this time for an informed redesign of this tariff."
 - i. Please describe PREPA's plans to gather that information.
- 22. CEPR-PC-03-022: Under the proposed rates, would a customer eligible for tariff code GRS 111 (students, handicapped or over 65 years of age) who uses more than 425 kWh in one month:
 - a. Get the fuel-oil subsidy for the first 425 kWh in that month?
 - b. Lose the entire fuel-oil subsidy for that month?
 - c. Lose its entire fuel-oil subsidy for some period of months?
 - d. Lose its entire fuel-oil subsidy permanently?
- 23. CEPR-PC-03-023: Please explain whether the fuel-oil subsidy operates in the same manner for tariff LRS and RH3 as for tariff code GRS 111, and if not, how that operation differs.
- 24. CEPR-PC-03-024: The tariff language for proposed tariffs LRS and RH3 and tariff code GRS 111 say that "the Fuel Oil Subsidy... applies only to the first 425 kWh consumed" (J Schedule pdf pp. 69, 73, and 77), but the proposed Fuel Oil Subsidy says that "This subsidy will only apply to customers in the appropriate tariffs whose consumption is under 425 kWh.... Those customers with a monthly energy consumption between 401 kWh and 425 kWh will pay 34% of the purchased fuel charge as determined by the Fuel Purchase Clause for the first 400 kWh consumer, and 100% of the monthly energy consumption over 400 kWh." (J Schedule pdf p. 219)

- a. Does the Fuel Oil Subsidy apply to the first 425 kWh (as stated on pp. 69, 73, and 77) or to the first 400 kWh (as stated on p. 219)?
- b. Do customers using more than 425 kWh retain the Fuel Oil Subsidy on the first 400 or 425 kWh (as suggested on pp. 69, 73, and 77) or lose all the subsidies if monthly usage reaches 426 kWh?
- 25. CEPR-PC-03-025: The fuel-oil subsidy tariff states that "For the first \$18 per barrel of oil in charges associated with fuel price, customers under this subsidy will each pay 34% of the total charge, according to the Fuel Charge Adjustment."
 - a. What is the importance of the phrase "For the first \$18 per barrel of oil in charges associated with fuel price"?
 - b. Does the subsidy increase or decrease when oil prices are over \$18/bbl?
 - c. Does the subsidy increase or decrease when oil prices are under \$18/bbl?
 - d. How is the price of oil per barrel determined?
- 26. CEPR-PC-03-026: Please explain how the fuel-oil subsidy has operated, and provide the ¢/kWh subsidy applied for each month from January 2013 to June 2016.
 - a. Please explain how the fuel-oil subsidy has been reflected on customer bills (e.g., as a reduction in the FCA rate, a reduction in kWh subject to the FCA rate, as a ¢/kWh credit).
- 27. CEPR-PC-03-027: Please explain how the fuel-oil subsidy would operate differently under the proposed rate than it has historically.
 - a. Would the subsidy only apply to the new Fuel Charge Adjustment, which may be positive or negative, or would it apply to the Fuel Charge Adjustment plus the cost of fuel included in base rates?
- 28. CEPR-PC-03-028: Please provide PREPA's projection of the fuel-oil subsidy per kWh for each month of 2017, given the forecast of oil prices assumed in forecasting the fuel costs.
- 29. CEPR-PC-03-029: Please explain how the fuel-oil subsidy is reflected in the H Schedules and the M Schedules for GRS. LRS and RH3.
- 30. CEPR-PC-03-030: Please explain how the fuel-oil subsidy is reflected in Schedule G.

- 31. CEPR-PC-03-031: Please provide a comparison among bills on GRS 111, LRS and RH3 for various usage levels, including the fuel-oil subsidy, for the usage levels used for those rates in Schedule M-1.
- 32. CEPR-PC-03-032: Do PREPA or Navigant have any opinions regarding the propriety of the relative magnitudes of the discounts or subsidies for GRS 111, LRS and RH3, compared to GRS 112? If so, please provide those opinions.
- 33. CEPR-PC-03-033: Please explain the meaning of the following entries in the tariff sheets of Schedule M-1:
 - a. Energy Charge Net
 - b. Energy Charge Gross
 - c. Energy Charge Export
 - C. The following requests refer to the Capex listed on Schedule F-3 REV.

Questions should be answered by the PREPA employee or representative most knowledgeable with the subject matter of the question. PREPA shall clearly identify the person providing the answer and his or her relationship to PREPA.

- 1. CEPR-RS-02-05: Were any of the Capex amounts or projects listed on Schedule F-3 REV not presented by PREPA for Commission review in the Integrated Resources Plan proceeding?
 - a. If so, please identify the Capex listed on Schedule F-3 REV that were not presented by PREPA for Commission review in the IRP proceeding.
 - b. For the Capex amounts listed in response to part a, did PREPA conduct any analysis to determine that each proposed Capex project was the most appropriate way to address the issues and would result in the lowest cost long-term cost?
 - i. If not, explain fully why not.
 - ii. If so, please identify and provide the analysis.
- 2. CEPR-RS-02-06: Refer to the Capex amounts or projects listed on Schedule F-3 REV.
 - a. Does PREPA have a prioritization of the \$336.558 millions of Capex for FY 2017? If so, please provide a prioritized list of the FY 2017 Capex.
 - b. If there were budgetary constraints imposed on PREPA's Capex for FY 2017, show the specific projects that would be funded:

- i. If the FY 2017 Capex spending were limited to \$100 million.
- ii. If the FY 2017 Capex spending were limited to \$200 million.
- c. Please explain the consequences to PREPA's service reliability and ability to achieve its targeted cost savings in as much detail as possible, if its FY 2017 Capex were limited to the amounts identified in part b(i) and b(ii), above.
- D. The following questions refer to PREPA's Responses to the Commission's Second Requirement of Information.

Questions should be answered by the PREPA employee or representative most knowledgeable with the subject matter of the question. PREPA shall clearly identify the person providing the answer and his or her relationship to PREPA.

- 1. CEPR-RS-02-06A: Refer to the response to CEPR-SGH-01-09(b).
 - a. Has the July 1, 2016 relending described in the response been reflected in PREPA's rate case filing?
 - i. If so, how and where?
 - ii. If not, what assumptions were made in the rate case filing and where are those reflected?
 - b. For each of the three series of bonds, provide a debt service schedule showing all scheduled interest and principal payments.
 - c. Is there any debt service coverage requirement for any of the three series of relending bonds?
 - i. If so, please explain the related DSCR for each issuance.
- 2. CEPR-RS-02-07: Refer to the response to CEPR-SGH-01-021.
 - a. Please show the cost of the completed conversion of the Costa Sur generating facility from oil to natural gas and show how PREPA has accounted for that cost.
 - b. Did PREPA record the conversion of the Costa Sur generating facility from oil to natural gas as plant in service?
 - i. If not, explain fully why not.
 - ii. If so, please show the amounts recorded in each plant account.

- c. How is PREPA accounting for the \$47 million for AOGP in FY 2016? Show the amounts that PREPA has recorded in each account.
- 3. CEPR-RS-02-08: Refer to the response to CEPR-SGH-01-037(e).
 - a. Are the following PREPA legacy bonds listed in Schedule D-2A all of PREPA's Build America Bonds:
 - b. Did PREPA record the conversion of the Costa Sur generating facility from oil to natural gas as plant in service?
 - i. If not, explain fully why not.
 - ii. If so, please show the amounts recorded in each plant account.
 - c. How is PREPA accounting for the \$47 million for AOGP in FY 2016? Show the amounts that PREPA has recorded in each account.
- 4. CEPR-RS-02-09: Refer to the response to CEPR-SGH-01-037(e).
 - a. Are the following PREPA legacy bonds listed in Schedule D-2A all of PREPA's Build America Bonds:

Ticker	MillCo Cusip	Series	Issued	Maturity Date	Term	Coupon	Coupon Type	Amount Outstanding or Maturity Size	% of Face Value	Amount at Issuance	Series Amount Outstanding
74526QZR6		BUILD AMERICA BONDS-TAXABLE-SER									
CUSIP	74526QZR6	EEE-ISSUER SUBSIDY	12/29/2010	07/01/30	19.5178	5.95	FIXED	60,905,000	9.011%	355,730,000	355,730,000
74526QZS4		BUILD AMERICA BONDS-TAXABLE-SER									
CUSIP	74526QZS4	EEE-ISSUER SUBSIDY	12/29/2010	07/01/32	21.5205	6.05	FIXED	217,335,000	32.155%	355,730,000	355,730,000
74526QZT2		BUILD AMERICA BONDS-TAXABLE-SER									
CUSIP	74526QZT2	EEE-ISSUER SUBSIDY	12/29/2010	07/01/40	29.526	6.25	FIXED	77,490,000	11.465%	355,730,000	355,730,000
74526QXT4		BUILD AMERICA BONDS TAXABLE-SER									
CUSIP	74526QXT4	YY-ISSUER SUBSIDY	4/29/2010	07/01/40	30.1945	6.125	FIXED	320,175,000	47.370%	320,175,000	320,175,000
							Totals	\$ 675,905,000		\$ 1,387,365,000	\$ 1,387,365,000

- b. If the response to part a is "no" please list all other PREPA Build America Bonds.
- c. Are any of PREPA's Build America Bonds subject to refinancing in the proposed securitization? If so, explain fully.
- d. Do the coupon rates listed on Schedule D-2A for the Build American Bonds reflect the "net of subsidies" actual interest cost?
 - i. If not, please identify the "net of subsidies" actual interest cost for each PREPA Build America Bond issuance.
- 5. CEPR-RS-02-10: PREPA's response to CEPR-SGH-01-038(d) states that: "Affiliate costs are not included in the filing except to the extent that they may provide specific services [that] are directly related to the operation of the electric grid to PREPA under any existing contracts."

- a. Please identify the affiliate costs recorded by PREPA in each account in the FY2014 test year. Please show these in total and by affiliate.
- b. Please show the affiliate costs proposed by PREPA in total and by account that are included in PREPA's proposed FY2017 revenue requirement. Please show these in total and by affiliate.
- c. Please explain the services provided by each affiliate in FY 2014 and under which existing contracts those services are being provided.
- d. To the extent not already provided, provide the affiliate contracts identified in response to part c.
- e. Identify the personnel at PREPA who are responsible for reviewing affiliate charges. For each person at PREPA who has such responsibility, please provide a brief description of their role.
- 6. CEPR-RS-02-11: An article in Caribbean Business News dated July 21 asserts that the credit rating agencies have declined to give the new securitization bonds an investment grade rating. (See, e.g., http://caribbeanbusiness.com/credit-rating-agencies-decline-investment-grade-for-prepa-bonds/).
 - a. Please state whether the credit rating agencies have declined to give the new securitization bonds an investment grade rating, and what PREPA is doing to address this matter.
 - b. Please state as clearly as possible what the rating agency concerns are that are preventing the new securitization debt from obtaining an investment grade rating.
 - c. Please provide all correspondence with the credit rating agencies in May, June and July (to date).
 - d. Please continue to update weekly throughout the duration of the PREPA rate case the status of the bond rating agencies rating process for the new securitization bonds.
- 7. CEPR-RS-02-12: Please address whether, when and how PREPA will re-file and update its requested FY2017 revenue requirement if it becomes apparent that the proposed financial restructuring and issuance of securitization debt will either not occur or will be delayed beyond the 180 day period allotted for Commission review of PREPA's rates in the current rate case.

- 8. CEPR-RS-02-13: An article Caribbean Business News dated July 14, 2016 (see, e.g., http://caribbeanbusiness.com/time-to-renegotiate-prepa-deal/) raises some issues and presents some allegations to which we would like PREPA to respond.
 - a. Does the passage of the federal PROMESA legislation provide an opportunity for PREPA to re-negotiate its financial restructuring deal?
 - i. If not, explain fully why not.
 - ii. If so, please explain the opportunity and how PREPA plans to proceed.
 - b. The article states that: "The PREPA deal establishes that the majority of bondholders will be paid in full, 100 cents on the dollar. A minority of bondholders will be paid 85 cents on the dollar." Please provide accurate quantified information concerning the amount of bonds that would be paid in full and the amount of bonds that would be paid at 85 cents on the dollar.
 - c. The article states that: "In order to pay PREPA bondholders, the majority at 100 cents on the dollar, there would have to be a surcharge of 4.4 cents per kilowatt-hour (kWh), or some \$750 million per year. This is the equivalent of almost a 3.5 percentage point increase in the IVU. Proposing such a huge tax increase on a weakened economy beset by emigration should bring howls of protest and indignation. However, the PREPA surcharge is discussed as if it would have no impact on the rest of the economy." Please respond to the following:
 - i. Does PREPA agree that the majority of PREPA bondholders would be paid at 100 cents on the dollar? If not, explain fully why not and state the proportion of PREPA bondholders that would be paid at 100 cents on the dollar under PREPA's financial restructuring.
 - ii. Does PREPA agree that the restructuring results in a surcharge of 4.4 cents per kilowatt-hour (kWh), or some \$750 million per year? If not, identify, quantify and explain the net rate impact of the proposed financial restructuring and the annual impact on the PREPA revenue requirement. Include supporting calculations.
 - iii. The article appears to imply that the PREPA financial restructuring will have a negative impact on the Puerto Rico

economy. Please provide PREPA's analysis concerning the impact its proposed financial restructuring would have on the Puerto Rico economy, including whether PREPA believes it will have a net positive impact or a negative impact, and explain the basis for PREPA's position.

- iv. The article implies that Ms. Donahue's compensation is contingent upon whether the PREPA financial restructuring is completed: "Perhaps Lisa Donahue, PREPA's chief restructuring officer, gets a "success" bonus if she closes the restructuring deal, despite committing to pay 100 cents on the dollar to the majority of the utility's creditors. If this is the case, her contract must be amended."
 - 1. Please identify, quantify and explain all contingent elements of the AlixPartners and Lisa Donahue compensation.
 - 2. Will Ms. Donahue or AlixPartners get a bonus if the PREPA restructuring deal is closed? If so, please identify, quantify and explain the impact.
 - 3. Has the agreement with AlixPartners been amended? If so, identify and provide the amendments.
- v. Please discuss what procedures PREPA has in place to address and respond to news articles about PREPA and its financial restructuring that PREPA believes are not factually accurate.

Responses to the requirements of information shall be submitted electronically by electronic mail to the following addresses: afigueroa@energia.pr.gov, tnegron@energia.pr.gov, and gbonet@energia.pr.gov. If responses are too voluminous to be sent by electronic mail, the responses shall be saved in a USB device and sent by mail with return receipt to: Cecilia Sánchez, 268 Muñoz Rivera Ave., World Plaza Suite 703, San Juan, PR 00918.

```
Cordially,
/s/Alejandro J. Figueroa Ramírez, Esq.
/s/Tania M. Negrón Vélez, Esq.
```