

PROFESSIONAL SERVICES AGREEMENT

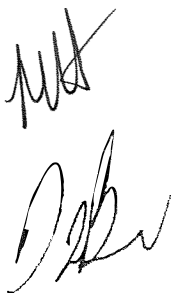
by and between

THE PUERTO RICO PUBLIC PRIVATE PARTNERSHIPS AUTHORITY

and

FTI CONSULTING, INC.

Dated as of April 30, 2019

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PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement (the "Agreement") for financial consulting and advisory services is made and entered into as of this 30th day of April, 2019, by and between **THE PUERTO RICO PUBLIC PRIVATE PARTNERSHIPS AUTHORITY**, a public corporation of the Government of Puerto Rico, established and authorized to enter into this Agreement by Act No. 29-2009, as amended, and represented herein by its Deputy Executive Director, Laura Femenías-Jove, of legal age, attorney, single, and resident of San Juan, Puerto Rico (the "Authority") and **FTI CONSULTING**, a corporation incorporated under the laws of the state of Maryland, USA with its executive headquarters in Washington DC, represented herein by its Senior Managing Director David Beckman, of legal age, married, consultant, and resident of Denver, Colorado, USA (the "Consultant"), and together with the Authority, the "Parties".

RECITALS

WHEREAS, the Authority, by virtue of the powers conferred to it under the Public-Private Partnerships Act, Act No. 29 of June 8, 2009, as amended ("Act 29"), is authorized to engage professional, technical and consulting services that are necessary and convenient to the activities, projects, and operations of the Authority.

WHEREAS, on February 4, 2019, the Consultant submitted to the Authority a proposal for financial advisory and consulting services in connection to Puerto Rico Electric Power Authority Transmission and Distribution System Project (the "Proposal"), attached hereto as **Appendix A** and made a part of this Agreement.

WHEREAS, after considering the Proposal, the Authority wishes to engage the Consultant to act as advisor to the Authority and the Government of Puerto Rico to provide financial advisory and consulting services in relation to Puerto Rico Electric Power Authority Transmission and Distribution System Project.

WHEREAS, the Consultant is willing to provide such services.

WHEREAS, the Authority is authorized to enter into this Agreement pursuant to Resolution 2019-05 of the Board of Directors of the Authority.

NOW, THEREFORE, the Authority and the Consultant agree to enter into this Agreement under the following:

TERMS AND CONDITIONS

ARTICLE I PURPOSE OF AGREEMENT; TERM

Section 1.1 Purpose of Agreement. The Authority engages the Consultant to provide financial consulting and advisory services to the Authority in connection with the Puerto Rico Electric Power Authority Transmission and Distribution System Project, as detailed in the



Proposal. In the event that the Authority desires to engage the Consultant to advise the Authority in any other matter that is not within the scope of the Proposal, the Parties shall negotiate in good faith a separate agreement or an amendment hereto with respect to such mandate.

Section 1.2. Term. This Agreement shall be in effect from the date of its execution until June 30, 2019 (the "Expiration Date"), provided that the Expiration Date may be extended by amendment executed in writing by both Parties.

ARTICLE II

SCOPE OF SERVICES; ADVICE AND RECOMMENDATIONS; SUBCONTRACTING

Section 2.1 Scope of Services. Subject to the terms and conditions of this Agreement, the Consultant's services shall be consistent with the provision of the deliverables, tasks and services described in the Proposal and such other tasks delegated to it by the Authority and within the capabilities of the Consultant.

Section 2.2. Advice and Recommendations. The services to be provided under this Agreement may include advice and recommendations for the benefit of the Authority and/or the Government of Puerto Rico, but the Consultant will not make any decisions on behalf of the Authority or the Government of Puerto Rico in connection with the implementation of such advice and recommendations.



Section 2.3 Subcontracting. Except as set forth in the Proposal (Appendix A), the Consultant shall not subcontract the services under this Agreement, or contract third-party experts or other persons to render the services under this Agreement, without prior written authorization from the Authority. The Authority has approved Mott MacDonald as a subcontractor, as defined in the Proposal, specifically to provide technical engineering services. A request to hire another service consultant shall specify the matters in which the sub-contracted consultant would take part.

ARTICLE III

COMPENSATION; INVOICES; OUT OF POCKET EXPENSES

Section 3.1 Professional Fees. The Authority shall compensate the Consultant for the actual time incurred in delivering the services and completing the tasks, assignments and deliverables set forth in **Appendix A**, at the applicable hourly rates listed in the Budget/Level of Effort Schedule provided in **Appendix A** of this Agreement.

The total amount to be paid by the Authority in relation to the services rendered under this Agreement shall not exceed SIX HUNDRED THOUSAND DOLLARS (\$600,000.00), including reimbursable expenses, unless otherwise agreed to by the Parties. The Consultant will submit monthly invoices to the Authority within thirty (30) days of performing the services being provided, which shall include a detailed description of the services rendered by the Consultant. Each invoice shall be itemized with entries for fractions of an hour based on quarter of an hour (.25) and must be duly certified by an authorized representative of the Consultant. The Authority will not honor invoices submitted after one hundred twenty (120) days of services having been rendered. The Consultant accepts and agrees to this requirement, and understands that if it does



not comply accordingly, it waives its right to payment for rendered services covered by such invoices. The Authority reserves the right to review the invoices and if they are in compliance with the requirements set forth in this Agreement, it will proceed with payment.

Each invoice must include a written certification stating that no officer or employee of the Authority will derive or obtain any benefit or profit of any kind from this Agreement, with the acknowledgment that invoices which do not include this certification will not be paid. This certification must read as follows:

“We certify under penalty of nullity that no public servant of the Puerto Rico Public-Private Partnerships Authority will derive or obtain any benefit or profit of any kind from the contractual relationship which is the basis of this invoice. If such benefit or profit exists, the required waiver has been obtained prior to entering into the Agreement. The only consideration to be received in exchange for the delivery of goods or for services provided is the agreed-upon price that has been negotiated with an authorized representative of the Puerto Rico Public-Private Partnerships Authority. The total amount shown on this invoice is true and correct. The services have been rendered, and no payment has been received in respect thereof.”

All invoices shall be signed and mailed or physically delivered to the attention of:

Puerto Rico Public-Private Partnerships Authority

POSTAL ADDRESS

PO Box 42001
San Juan, PR 00940-2001

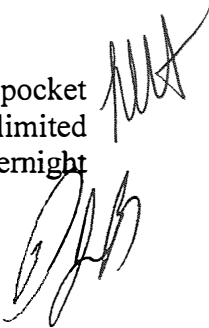
PHYSICAL ADDRESS

De Diego Avenue No. 100
Roberto Sánchez Vilella Government Center
Central Building Floor 3
Santurce, PR 00907-2345

The Consultant agrees to submit checking account transfer data to the Authority in order to facilitate future payments by means of electronic transfers. In addition to any other remedies available at law, Consultant reserves the right to stop providing Services in event any invoice amounts are not paid within sixty (60) days of the invoice date.

Section 3.2 Travel and Out of Pocket Expenses

(a) The Authority will reimburse the Consultant on a monthly basis for out of pocket expenses directly related to the services rendered under this Agreement, including, but not limited to, travel and lodging, filing fees, taxi fares, delivery expenses, and services such as overnight mail, courier and messenger charges.



(b) Any expense for which a reimbursement is requested shall be reasonable and necessary, and any expenses exceeding FIVE THOUSAND DOLLARS (\$5,000.00) individually shall be authorized in writing and in advance by the Authority. The Authority will not reimburse expenses which do not comply with this provision. Under no circumstances will expenses for alcoholic beverages be reimbursed.

(c) Any petition for reimbursement of expenses must be accompanied by the corresponding invoice or receipt and shall specify the relation of the expense to the services rendered. All reimbursements shall be for actual expenses incurred and shall be billed at cost.

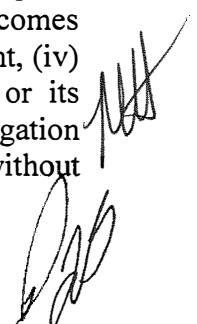
ARTICLE IV INFORMATION; CONFIDENTIALITY

Section 4.1. Information Provided by the Consultant. No information or advice provided or materials prepared by the Consultant as a result of its activities hereunder may be disclosed, in whole or in part, or summarized, excerpted from or otherwise referred to a third party outside of the Executive Branch (other than, on a confidential, non-reliance, need to know basis, to the Authority's employees, advisors, counsel and other representatives) without the Consultant's prior written consent, which shall be conditioned on the execution of a release letter in the form provided by Consultant unless compelled by law or court order. In addition, the Authority agrees that any reference to the Consultant in any press release or communication is subject to the Consultant's prior written approval, which may be given or withheld in its reasonable discretion, for each such reference. The Authority shall retain the right to use, refer, share, or provide to any third party, as the Authority may determine, the results of any: analyses, investigation summaries; and, written reports resulting from the Services performed by the Consultant that were specifically designated as a final deliverable that were provided to the Authority under this Agreement.

Section 4.2. Confidential Information.

(a) The Consultant acknowledges the proprietary and confidential nature of all internal, non-public, information systems, financial, and business information relating to the Authority, as well as to the Government of Puerto Rico, its agencies, corporations or municipalities, now or hereafter provided to the Consultant (the "Confidential Information").

(b) The Consultant and its Representatives (as defined below) shall keep in confidence in accordance with the terms of this Agreement all such Confidential Information and shall not, except as otherwise set forth herein, make public or disclose any of said information without the previous written consent of the Authority. The Consultant and its Representatives may use the Confidential Information in connection with providing the services contemplated by this Agreement. The term Confidential Information shall not include information which (i) is previously known to the Consultant and/or its Representatives, (ii) is available to the public prior to the time of disclosure hereunder, (iii) subsequent to the time of disclosure hereunder, becomes available to the public other than as a result of a breach of this Agreement by the Consultant, (iv) subsequent to the time of disclosure hereunder becomes available to the Consultant or its Representatives by a third party who, to the knowledge of the Consultant, is under no obligation to keep the information confidential, (v) is independently developed by the Consultant without



reference to the Confidential Information or (vi) is approved for disclosure or release by the Authority.

(c) Notwithstanding the above, the Consultant and/or its Representatives, as applicable, may disclose Confidential Information to (a) its affiliates and approved subcontractors and their respective directors, officers, employees, agents, consultants, advisors and/or representatives (such individuals receiving Confidential Information hereunder, collectively, the "Representatives") who need to know such Confidential Information to fulfill the purposes of this Agreement, provided that such persons shall have been advised of the confidential nature of such materials and information and the Consultant shall direct them to treat as confidential such information and to return all materials to the Consultant upon request; provided, that the Consultant shall be responsible for any breach of this Agreement by its Representatives and (b) pursuant to a request or requirement by law, regulation or governmental, regulatory or self-regulatory authority or legal process (including by oral questions, interrogatories, requests for information or documents, subpoena, civil investigative demand or other process) to provide such Confidential Information.



(d) The Consultant will promptly, upon the written request of the Authority, deliver to the Authority, or at the Authority's election, destroy all Confidential Information; provided, however, that the Consultant and its Representatives may retain copies of Confidential Information, subject to the confidentiality terms of this Agreement, in accordance with their respective internal record retention policies for legal, compliance or regulatory purposes or to establish the rights of the Consultant and its Representatives under this Agreement.

(e) This provision shall survive the termination or expiration of this Agreement for a period of two (2) years.

ARTICLE V BREACH; TERMINATION

Section 5.1 Breach of Contract Terms. Any violation or breach of terms of this Agreement on the part of the Consultant or the Consultant's subcontractors, if any, may result in the suspension or termination of this Agreement or such other action, including the recovery of damages (such damages to be limited as per Section 6.1(a) herein) that may be necessary to enforce the rights of the Authority. The duties and obligations imposed by the Agreement and the rights and remedies available thereunder shall be in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

Section 5.2 Termination with or Without Cause. Notwithstanding any provision to the contrary in this Agreement, the Authority shall have the right to terminate this Agreement without cause by providing the Consultant thirty (30) days' notice by registered mail, return receipt requested, or overnight express mail. Any provisions of this Agreement which expressly or by implication are intended to survive its termination or expiration will survive and continue to bind the Parties. The Authority shall also have the right to terminate this Agreement immediately, without prior notice, if the Consultant incurs in negligence, abandonment of its obligations and/or breach of the terms of the Agreement. The Consultant may terminate this Agreement if it determines any part of the services rendered hereunder would be in conflict with law or



professional standards.

Section 5.3 **Termination by the Office of the Governor's Chief of Staff.** The Office of the Governor of Puerto Rico's Chief of Staff has the authority to terminate this Agreement at any time on behalf of the Authority.

Section 5.4 Upon any termination or expiration of this Agreement, the Authority shall promptly pay the Consultant any accrued but unpaid fees hereunder, and shall reimburse the Consultant for any unreimbursed expenses that are reimbursable hereunder.

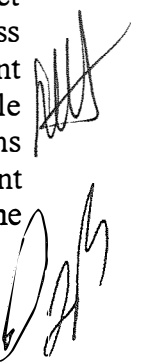
Section 5.5 Upon any termination or expiration of this Agreement, the rights and obligations of the Parties shall terminate, except for the rights and obligations that shall survive the termination or expiration of this Agreement.

ARTICLE VI INDEMNIFICATION; INSURANCE

Section 6.1. Indemnification and Liability.

(a) Insofar as such agreement is consistent with and does not invalidate, impair or limit the Consultant's professional liability insurance coverage, the Consultant agrees to defend, indemnify and hold the Authority, its officers, officials, and employees, harmless from any and all claims, injuries, damages, losses or suits including attorney fees ("Claims"), to the extent arising out of or resulting from the gross negligence or willful misconduct of the Consultant in the performance of its obligations under this Agreement (as determined by a final, non-appealable judgment by a court of competent jurisdiction). The Consultant, its subsidiaries and subcontractors, and their respective personnel shall not be liable to the Authority for any Claims relating to this engagement for an aggregate amount in excess of the fees paid by the Authority to the Consultant pursuant to this engagement, except to the extent resulting from the bad faith or intentional misconduct of the Consultant or its subcontractors. In no event shall the Consultant, its subsidiaries or subcontractors, or their respective personnel be liable to the Authority for any loss of use, data, goodwill, revenues or profits (whether or not deemed to constitute a direct Claim), or any consequential, special, indirect, incidental, punitive, or exemplary loss, damage, or expense relating to this engagement. The foregoing limitation of liability and disclaimer shall not apply to Claims for which a party is obligated to indemnify under this Agreement.

(b) Each Party shall indemnify, defend and hold harmless the other from and against any and all amounts payable under any judgment, verdict, court order or settlement for death or bodily injury or the damage to or loss or destruction of any real or tangible personal property, but only to the extent the foregoing arise out of the indemnitor's negligence or intentional misconduct in the performance of this Agreement. The Consultant shall indemnify, defend and hold harmless the Authority from all Claims arising from claims brought by any subcontractor of the Consultant hereunder against the Authority for payment or for other damages arising under the applicable subcontract agreement between the Consultant and such subcontractor except for those claims caused by the Authority. The Authority shall indemnify, defend and hold harmless the Consultant from all claims, injuries, damages, losses or suits including attorney fees arising out of the

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Authority's use and/or disclosure of any work product provided by Consultant hereunder. The Consultant hereby agrees to use reasonable efforts to mitigate any and all damages and other losses to the Authority and any entity of the Executive Branch. To the extent permitted by law, all claims and Losses relating to, directly or indirectly, or arising from this Agreement (including the Services), however caused, regardless of the form of action and on any theory of liability, including contract, strict liability, negligence or other tort, shall be brought under and shall be subject to the terms of this Agreement.

Section 6.2. Insurance.

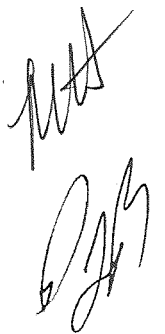
(a) The Consultant represents that as of the date of execution of this Agreement, it maintains professional liability insurance to provide for errors, omissions and negligent acts that may arise from the services rendered under this Agreement in the minimum amount of ONE MILLION DOLLARS (\$1,000,000.00).

(b) The Consultant also represents that it maintains Commercial General Liability insurance in the minimum amount of ONE MILLION DOLLARS (\$1,000,000.00). It shall be the Consultant's obligation to submit to the Authority the corresponding certifications from its insurance company evidencing such coverages. The certifications provided must identify the Authority as Additional Insured.

(c) With respect to the Commercial General Liability insurance policy, the certification to be provided by the Consultant must identify the Authority as Additional Insured and include the following cancellation notice:

"CANCELLATION CLAUSE: It is understood and agreed that in the event of cancellation of this policy at the request of the insurance company, thirty (30) days written notice shall be given to the above mentioned additional insured, PUERTO RICO PUBLIC PRIVATE PARTNERSHIPS AUTHORITY. However, it is agreed that if cancellation is due to non-payment of premium, ten (10) days written notice will be given".

It shall be the Consultant's obligation to submit to the Authority the corresponding certifications from its insurance company evidencing the abovementioned insurance coverage. The insurance policies required herein must remain in effect during the term of this Agreement, including any amendments to extend said term.

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ARTICLE VII APPLICABLE LAWS OF PUERTO RICO

Section 7.1. Interagency Service Clause. Both Parties acknowledge and agree that the contracted services may be provided to any entity of the Executive Branch with which the Authority subscribes an interagency agreement or by direct disposition of the Office of the Chief of Staff of the Governor of Puerto Rico. These services will be provided under the same terms and conditions regarding work hours and/or compensation as set forth in this Agreement. For purposes of this section, the term “entity of the Executive Branch” includes all agencies of the Government of Puerto Rico, as well as its instrumentalities, public corporations and the Governor’s Office.

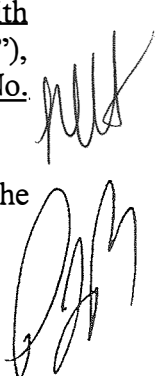
Section 7.2. Source of Funds. The Authority certifies that the funds for the payment related to the services rendered under this Agreement come from budgetary allocations. All disbursements for such payments shall be made from the Puerto Rico Public Partnerships Authority’s account.

Section 7.3. Professional Ethics Rules. The Consultant acknowledges and accepts that, to the extent applicable, it is knowledgeable regarding the rules of ethics of its profession and assume responsibility for its own actions. The Consultant also acknowledges that in executing its professional services pursuant to this Agreement it has the obligation to exhibit complete loyalty towards the Authority, including having no adverse interest to this government entity. Adverse interest includes representing clients relative to interests that are contrary to the Authority’s. This duty includes the continued obligation to disclose to the Authority, when permitted under the applicable rules of professional conduct, all circumstances of its relationships with clients and third persons or any interests adverse to the Authority, which could influence the Consultant when executing the Agreement or while it is in effect. The Authority acknowledges that the Consultant is a large global consulting firm with numerous offices around the world. The Consultant is regularly engaged by new clients including financial institutions and investors and any such client may from time to time acquire, hold or trade interests adverse to The Authority or its affiliates. None of the Consultant’s professionals involved in this matter will participate in providing any services which directly conflicts with its duties hereunder without the express written consent of the Authority. It is understood that the Consultant’s representation of these clients in unrelated matters shall not be deemed conflicts or influences on the Consultant hereunder. If any one of the Consultant’s professionals violate the above clause, such violation shall constitute a violation of this prohibition. The Consultant commits to take all reasonable precautions to attempt to avoid even the appearance of having a conflict of interest to The Authority that has not otherwise been waived..

Section 7.4. Anti-Corruption Provisions.

(a) The Consultant certifies that it has received a copy of and agrees to comply with Act No. 2-2018, known as the Anti-Corruption Code for the New Puerto Rico (“Act No. 2-2018”), and with the Puerto Rico Government Ethics Law of 2011, Act No. 1-2012, as amended (“Act No. 1-2012”).

(b) The Consultant shall furnish a sworn statement to the effect that neither the

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Consultant nor any president, vice president, executive director or any member of a board of officials or board of directors, or any person performing equivalent functions for the Consultant has been convicted of or has pled guilty to any of the crimes listed in Article 6.8 of Act No. 8-2017, as amended, known as the Act for the Administration and Transformation of Human Resources in the Government of Puerto Rico ("Act No. 8-2017"), or any of the crimes included in Act No. 2-2018.

(c) The Consultant hereby certifies that it has not been convicted in Puerto Rico or United States Federal Court under Articles 4.2, 4.3 or 5.7 of Act No. 1-2012, for any of the crimes listed in Articles 250 through 266 of Act No. 146-2012, as amended, known as the Puerto Rico Penal Code ("Act No. 146-2012"), any of the crimes typified in Act No. 2-2018, or any other felony that involves misuse of public funds or property, including, but not limited to, the crimes mentioned in Article 6.8 of Act No. 8-2017.

(d) The Authority shall have the right to terminate this Agreement in the event the Consultant is convicted in Puerto Rico or United States Federal Court under Articles 4.2, 4.3 or 5.7 of Act No. 1-2012, any of the crimes listed in Articles 250 through 266 of Act No. 146-2012, any of the crimes typified in Act No. 2-2018, or any other felony that involves misuse of public funds or property, including, but not limited to, the crimes mentioned in Article 6.8 of Act No. 8-2017.

(e) It is expressly acknowledged that this certification is an essential condition of this Agreement. If the certification is not correct in its entirety or in any of its parts, it shall constitute sufficient cause for the Authority to terminate this Agreement immediately, without prior notice, and the Consultant will have to reimburse the Authority any amount of money received under this Agreement.

(f) If the status of the Consultant or any of its shareholders, partners, associates, officers, directors, employees or agents with regards to the charges previously mentioned should change at any time during the term of the Agreement, the Consultant shall notify in writing to the Authority immediately. The failure to comply with this responsibility constitutes a violation of this Clause, and shall result in the remedies mentioned previously.

Section 7.5. Improvement of Family Assistance and Support for the Elderly. The Consultant also certifies and warrants that it is in compliance with Act No. 168-2000, as amended, known as the "Act for the Improvement of Family Assistance and for the Support of the Elderly." In the event the Consultant is under a court or administrative order directing it to provide financial support or to fulfill any obligation under the mentioned Act, the Consultant further certifies and warrants that it is in compliance with said obligations. It is expressly acknowledged that this certification is an essential condition of this Agreement. If the certification is not correct in its entirety or in any of its parts, it shall constitute sufficient cause for the Authority to terminate the Agreement immediately, without prior notice to the Consultant.

Section 7.6. Conflicts of Interests.

(a) Both Parties hereby declare that, to the best of their knowledge, as of the date



hereof, no public officer or employee of the Government of Puerto Rico, or any of its agencies, instrumentalities, public corporations or municipalities or employee of the Legislative or Judicial branches of the Government has any direct or indirect interest in the present Agreement. The Consultant certifies that neither it, nor any of its directors, executives, officers or employees, offered or paid, directly or indirectly, any commissions, referrals, contracts, or any other consideration having an economic value, to a third party as a condition for obtaining this Agreement or to influence in any way its execution. In addition, the Consultant certifies that it shall not pay any commissions, make any referrals, execute any contracts, or provide any other consideration having an economic value, to a third party for the services to be rendered under this Agreement, except for any subcontracts authorized by the Authority in accordance with the provisions established herein.

(b) The Consultant certifies that none of its partners, directors, executives, officers and employees receives salary or any kind of compensation for the delivery of regular services by appointment (or otherwise) in any agency, instrumentality, public corporation, or municipality of the Government of Puerto Rico.

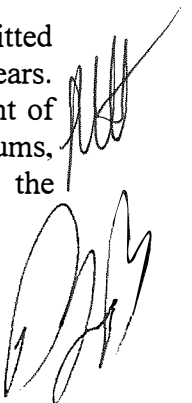
(c) The Consultant certifies that, at the time of the execution of this Agreement, it does not have nor, to its knowledge, does it represent anyone relative to interests that are in conflict with the Consultant's duties to the Authority under this Agreement. If such conflicting interests arise after the execution of this Agreement, the Consultant shall notify the Authority during a period of five (5) business day from the day the Consultant learned of such conflict of interest, to determine the actions needed to resolve such potential conflict, subject to obligations of privilege and confidentiality.

(d) The Consultant certifies that at the time of execution of this Agreement it has no other contracts with any agencies, public corporations, municipalities, or instrumentalities of the Government of Puerto Rico.

(e) The Consultant currently represents the Official Committee of Retired Employees of Puerto Rico (the 'Retiree Committee') in the Title III cases brought under the Puerto Rico Oversight, Management and Economic Stability Act ("PROMESA"). Consultant agrees that none of its professionals that are actively involved in the PROMESA-related matter will be involved in its work for the Authority and vice versa. Consultant will also establish an internal "Ethical Wall" to ensure that information received or reviewed, or work product created, in connection with Consultant's engagement on behalf of the Authority is not inadvertently shared with or made available to those who should not have access to it.

Section 7.7. Required Certifications.

(a) The Consultant represents that at the execution of this Agreement, it has submitted income tax returns in Puerto Rico (if required by applicable law) during the past five (5) years. The Consultant also represents that it does not have outstanding debts with the Government of Puerto Rico for income taxes, real or chattel property taxes, unemployment insurance premiums, workers' compensation payments or Social Security for chauffeurs in Puerto Rico and the

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Administration for the Sustenance of Minors (known by its Spanish acronym as "ASUME").

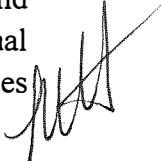
(b) The Consultant has provided the Authority with a certificate of incorporation, if required by the Authority. The Consultant also certifies that it is not required to register to do business in Puerto Rico because there are not more than 90 days in any year in which any of Consultant's employees are present on the island of Puerto Rico.

(c) It is expressly acknowledged that the certifications provided by the Consultant, pursuant to this Section 7.7, are essential conditions of this Agreement, and if these certifications are incorrect, the Authority shall have sufficient cause to terminate this Agreement immediately, without prior notice to the Consultant.

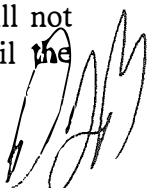
(d) For purposes of this Agreement, tax debt shall mean any debt that the Consultant, or other parties which the Authority authorizes the Consultant to subcontract, may have with the Government of Puerto Rico for income taxes, real or chattel property taxes, including any special taxes levied, license rights, tax withholdings for payment of salaries and professional services, taxes for payment of interest, dividends and income to individuals, corporations and non-resident accounting firms, for payment of interests, dividends and other earnings shares to residents, unemployment insurance premiums, workers' compensation payments, Social Security for chauffeurs and ASUME.

(e) The Consultant shall also be responsible for providing the Authority with the certifications required under this clause from any professional or technical consultant subcontracted by the Consultant and authorized by the Authority that dedicates twenty-five percent (25%) or more of his or her or its time to provide advisory services related to the Agreement. Such subcontractors shall be considered subcontractors for the purposes of this Clause. Notwithstanding anything herein to the contrary, the Consultant shall have the right to rely conclusively on the aforementioned certifications from government agencies in making the representations in this Clause.

Section 7.8. Withholdings. The Consultant agrees and acknowledges that it has sole responsibility and liability for any and all taxes, contributions, penalties, interest, licenses, fees or other sums payable in connection with the fees and/or expenses paid pursuant to this Agreement, including, without limitation, any Commonwealth, federal and local income taxes, tax withholdings, excise taxes, sales and use taxes, payroll taxes, municipal taxes and any other taxes applicable under the tax laws of Puerto Rico, the United States, or any other jurisdiction, as such laws may be amended from time to time. Notwithstanding the foregoing, unless Consultant provides to Authority a waiver or exemption certificate issued by the Puerto Rico Department of the Treasury (the "PR Treasury"), the parties hereby agree that the Authority shall withhold and submit to the PR Treasury all amounts required to be withheld pursuant to the Puerto Rico Internal Revenue Code of 2011, as amended from time to time (the "PR Code") and any other taxes required to be withheld under any applicable laws, as amended from time to time.



Section 7.9. Registration at the Office of the Comptroller. The Consultant will not receive any payment for the services rendered under the terms of this Agreement until the



Agreement has been registered at the Office of the Comptroller of Puerto Rico, as required by Act No. 18 of October 30, 1975, as amended.

Section 7.10. Dispensation. The Consultant certifies it is not required to obtain a dispensation or waiver in compliance with the applicable laws and regulations of the Government of Puerto Rico prior to or in connection with the execution of this Agreement. The Parties agree that the proven illegality of any of the provisions of this Agreement shall not invalidate it as a whole.

ARTICLE VIII GOVERNING LAW; DISPUTE RESOLUTION

Section 8.1. Governing Law. This Agreement and any dispute relating to the services hereunder shall be governed, construed, interpreted and enforced in accordance with the laws of the Government of Puerto Rico.

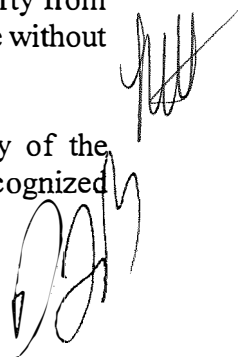
Section 8.2. Dispute Resolution. The Parties agree that any dispute, claim or controversy directly or indirectly relating to or arising out of this Agreement, the termination or validity of this Agreement, any alleged breach of this Agreement, the engagement contemplated by this Agreement or the determination of the scope of applicability of this Agreement shall be brought only in the United States District Court for the District of Puerto Rico. The Authority and the Consultant also agree that service of process may be effected through next-day delivery using a nationally-recognized overnight courier or personally delivered to the addresses set forth or referred to in this Agreement. In any claim, all of the costs and the reasonable attorneys' fees of the prevailing party (as determined by the court in such claim) shall be borne by the party who did not prevail. The Authority and the Consultant further agree after all appeals that a final, non-appealable judgment in respect of any claim brought in any such court shall be binding and may be enforced in any other court having jurisdiction over the party against whom the judgment is sought to be enforced.

ARTICLE IX MISCELLANEOUS

Section 9.1. Independent Contractor. The Authority and the Consultant agree that the Consultant's status hereunder, and the status of any agents, employees and subcontractors engaged by the Consultant, shall be that of an independent contractor only and not that of an employee or agent of the Authority. The Consultant shall not have any power or right to enter into agreements on behalf of the Authority.

Section 9.2. Assignment. This Agreement may not be assigned by either party hereto without the prior written consent of the other, to be given in the sole discretion of the party from whom such consent is being requested. Any attempted assignment of this Agreement made without such consent shall be void and of no effect, at the option of the non-assigning party.

Section 9.3. Notice. Notice required to be given in writing pursuant to any of the provisions of this Agreement shall be mailed by next-day delivery using a nationally-recognized

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overnight courier or hand-delivered, if to the Consultant, at 1001 17th Street, suite 1001, Denver, Colorado, USA 80202, and if to the Authority, at the addresses provided above.

Section 9.4. Patriot Act. The Consultant hereby notifies the Authority that pursuant to the requirements of the USA PATRIOT Improvement and Reauthorization Act. Pub. L. N 109-177 (Mar. 9, 2006) (the "Patriot Act"), it is required to obtain, verify and record information that identifies the Authority in a manner that satisfies the requirements of the Patriot Act. This notice is given in accordance with the requirements of the Patriot Act.

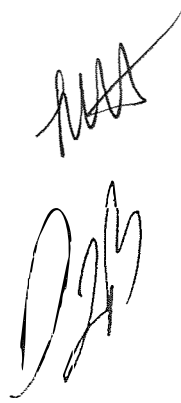
Section 9.5. No Third Party Rights. It is understood that this Agreement is the sole agreement between the parties with regard to the services covered hereby and supersedes any prior agreements, written or verbal. The Agreement may not be changed orally, but may be amended in writing by mutual agreement of the parties. This Agreement is solely for the benefit of the Authority, the Consultant and, to the extent expressly set forth herein, the Indemnified Persons and no other party shall be a third party beneficiary to, or otherwise acquire or have any rights under or by virtue of, this Agreement.

Section 9.6. Drafting Responsibility. This Agreement has been reviewed by each of the signatories hereto and counsel. There shall be no construction of any provision against either Party because this Agreement was drafted by either Party, and the Parties waive any statute or rule of law to such effect.

Section 9.7. Severability. If any provision hereof shall be held by a court of competent jurisdiction to be invalid, void or unenforceable in any respect, or against public policy, such determination shall not affect such provision in any other respect nor any other provision hereof.


Section 9.8. Counterparts. This Agreement may be executed in facsimile or other electronic counterparts, each of which will be deemed to be an original and all of which together will be deemed to be one and the same document.

These terms constitute the entire agreement between the Parties with respect to this engagement; supersede all other oral and written representations, understandings, or agreements relating to this engagement; and may not be amended except by a written agreement signed by both Parties.




IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the
aforementioned date.

**PUERTO RICO PUBLIC PRIVATE
PARTNERSHIPS AUTHORITY**


Laura Femenías-Jové
Deputy Executive Director

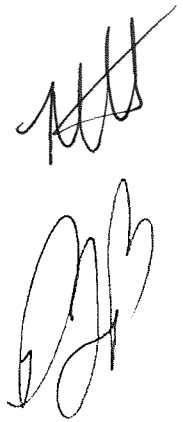
FTI CONSULTING, INC.


David Beckman
Senior Managing Director



APPENDIX A

[See attached Proposal]

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FTI Presentation of Qualifications

February 2019

Prepared in Conjunction With:



Presented To:



GOVERNMENT OF PUERTO RICO
Puerto Rico Public-Private Partnerships Authority



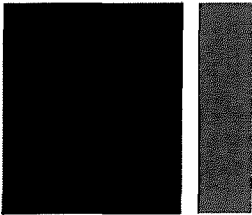
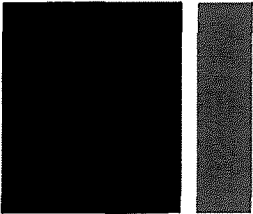


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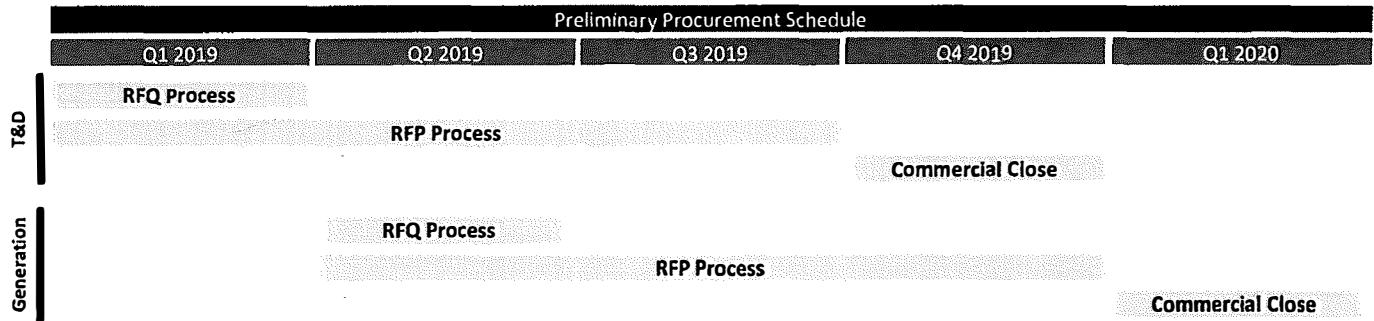
Executive Summary

Our Understanding of the Situation

Thank you for the opportunity to present FTI’s unique qualifications to assist the Puerto Rico Public-Private Partnerships Authority (the Authority) as Technical and Financial Advisor for the analysis of potential public-private partnership (PPP) projects related to the transformation of Puerto Rico Electric Power Authority (PREPA). The Authority has expressed its desire to undertake a series of energy-related PPP projects including:

- Transmission & Distribution – contracting for the operation, maintenance, and management of the transmission and distribution system (in process);
- Peakers – replacing eighteen GE Frame V PREPA peaking units with new Gas Turbine dual fuel packages at seven (7) different locations;
- Legacy Generation Assets – assessing contractual arrangements for the operation, maintenance, and management, or sale, of specific energy generation assets;
- Call Center – reevaluating the operation of PREPA’s customer call center;
- Hydroelectric Assets – expanding and accelerating the development and integration of new renewable energy generation;
- New Generation – projects related to new renewable energy generation; and
- Other projects that arise either through a solicited or an unsolicited process.

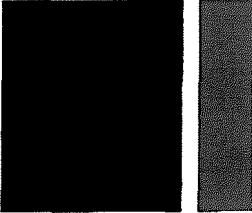
Below is our understanding of the Authority’s targeted schedule for T&D and generation procurement processes.



The Authority has recently announced the selection of four prequalified bidders with the necessary experience to manage and operate all aspects of the electricity T&D system of PREPA through the PPP mechanism. The prequalified bidders, Exelon, Duke, PSEG and the Quanta Consortium, will submit responses to a request for proposal (RFP) competing for the PPP project that will facilitate the modernization and transformation of Puerto Rico’s electric system.

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Executive Summary

Our Understanding of the Situation

It is our understanding that the Technical and Financial Advisors to the Authority will have primary responsibility for reviewing, assessing, ranking and reporting on the RFP submissions and assisting the Authority in selecting the Private Partner. The Authority also expects to initiate a formal request for qualification (RFQ) process for Generation Asset projects in Q2 2019. Both processes will need to address the mandates laid out by PREPA's Integrated Resource Plan (IRP), due to be issued on February 12, 2019.

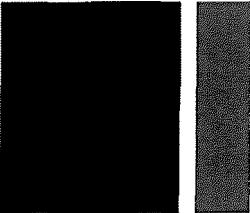
Successful execution of all PPP initiatives by the Authority will require a broad spectrum of skills and expertise from which to properly assess the benefits and risks of each structure across a wide variety of asset types. FTI has the range of technical, financial and reputational expertise in-house with demonstratable experience applying it across conventional generation, renewable energy and electric utilities. As Technical and Financial Advisor to the Authority, FTI will provide detailed and actionable insights, both from an operational and capital advisory perspective, throughout each step of the PPP process. In addition, FTI has previous experience working with the Government of Puerto Rico, and with PREPA in particular, on matters ranging from financial restructuring to operations analysis and strategic communications – familiarity that would allow us to quickly mobilize our team to make an immediate impact and reduce the need for extensive background research into the unique challenges of the electric system.

To further enhance our technical qualifications, FTI will partner with Mott MacDonald, one of the largest power engineering consultancies in the world, to provide additional expertise. Mott MacDonald will act as a subcontractor to FTI and all deliverables and project management tasks will be managed and coordinated by FTI. FTI and Mott MacDonald (herein referred to as the FTI Consortium) understand the Authority's challenges in evaluating and selecting qualified PPP participants and navigating the concession, transition and transformation phases. The FTI Consortium of professionals possess direct technical power systems, regulatory, financial and commercial expertise to effectively advise the Authority.

FTI experts who would lead this engagement include:

- **Ellen Smith, Senior Managing Director, FTI:** Ms. Smith is a Power Systems Engineer with 35 years of power and utility experience in all areas of operations, regulatory work and in transformation. She has worked extensively with PREPA in 2015 and has a detailed understanding of the PREPA assets and transformation opportunities. Prior to FTI, Ms. Smith served as the COO of a large US utility and as part of her duties was responsible for a 3rd party utility O&M services contract in addition to having responsibility for T&D, power generation and LNG assets.
- **John Cochrane, Senior Managing Director, FTI:** Mr. Cochrane has been a utility finance, regulatory and M&A/transactions expert for over 30 years. He has been involved in large and highly complex transactions including a long term utility services and power plant contract with a state entity. He was also Chief Financial Officer and Treasurer for National Grid's U.S. business where he was responsible for all financial functions, mergers & acquisitions, structuring of power purchase contracts, risk management and energy supply.





Executive Summary

Our Understanding of the Situation

- **Jared Hicks, PE, Senior Project Engineer, Mott MacDonald:** Mr. Hicks has 15 years of experience in the civil and geotechnical engineering fields, primarily for traditional power generation, power delivery, oil and gas, solar PV, and wind projects. He has extensive experience performing technical due diligence in Puerto Rico, including undertaking site visits. In particular, he evaluated civil and geotechnical aspects of the proposed 30MWac Yabacoa PV facility and reviewed all civil, structural and geotechnical aspects of the proposed San Fermin Solar project, located in Loiza, Puerto Rico.
- **Dave Beckman, Senior Managing Director, FTI:** Mr. Beckman has over 30 years experience advising energy companies, serving as CRO and representing creditors, debtors and other parties facing the demands of either a financial or operational restructuring over the last twenty years. Mr. Beckman had been a professional in the Energy Department of the World Bank / International Bank for Reconstruction and Development in Washington D.C.
- **Ana Heeren, Senior Managing Director, FTI:** Ms. Heeren leads FTI Consulting's Latin America and Caribbean offering within Strategic Communications where she has developed comprehensive external and internal communication plans, public relations strategies and stakeholder engagements in places such as Spain, Brazil, Mexico, Peru, Puerto Rico, the UK and the US.

As a result of the experience noted above, the FTI Consortium will be able to support the Authority in evaluating and selecting the right Private Partner who can demonstrate a deep understanding of T&D operations, generation modernization and resiliency initiatives while ensuring all areas of operations can be transitioned safely, reliably and seamlessly.

We are pleased to present FTI's unique qualifications for the role of Technical and Financial Advisor to the Authority in the pages that follow. Please feel free to contact us for any further questions, clarifications, or next steps.

Sincerely,



Ellen Smith
Senior Managing Director, FTI
ellen.smith@fticonsulting.com
617.747.1871

Ana Heeren
Senior Managing Director, FTI
ana.heeren@fticonsulting.com
202.346.8824

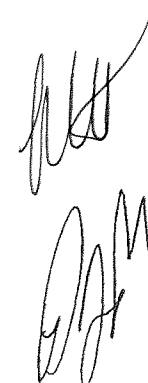
John Cochrane
Senior Managing Director, FTI
john.cochrane@fticonsulting.com
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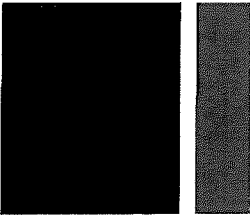
Dave Beckman
Senior Managing Director, FTI
dave.beckman@fticonsulting.com
303.689.8878

Jared Hicks
Senior Project Engineer, Mott MacDonald
jared.hicks@mottmac.com
810.428.6399



Overview of the FTI Consortium






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Overview of the FTI Consortium


Our Competencies

■ The FTI Consortium’s expertise is well aligned to advise the Authority across the full range of requirements to assist in the evaluation and review of the technical, regulatory and financial aspects of the PPP projects. Our relevant core competencies are displayed in the table below.

T&D Operations	Generation	Due Diligence	Financial Analysis	Contract Negotiation
				
<div>■ FTI professionals have held executive positions in T&D utilities and as such have considerable hands on experience in safe, reliable and cost-effective electric utility operations.</div>	<div>■ FTI has significant experience operating and managing a variety of different generation technologies including renewable and conventional and developing new power plant projects.</div>	<div>■ FTI brings to bear experts capable of covering each facet of transaction due diligence including operational, technical and financial expertise with extensive experience in generation and T&D transactions.</div>	<div>■ FTI professionals have prepared economic and financial analysis supporting the structuring of PPP arrangements.</div> <div>■ FTI has cost of capital and capital market experts who testify in utility rate cases.</div>	<div>■ FTI has significant experience designing, evaluating, and negotiating contract between private investors and public sponsors.</div>
<div>■ MM’s T&D expertise covers initial reconnaissance, feasibility and environmental impact studies, through electrical, mechanical, and civil design and commercial and technical contract documentation, to project management and supervision of implementation.</div>	<div>■ MM has global power generation expertise in feasibility and scoping studies, detailed design, plant specification and tender review, contract negotiations, project management and involvement in plant enhancement studies during the operations phase across all generation types.</div>	<div>■ MM has considerable technical expertise as the engineer advisors on a large number of due diligence assignments during the project finance process for major power plant projects all over the world.</div>	<div>■ MM’s technical expertise will support FTI in assessing all operational and technical assumptions included in the financial analyses.</div>	<div>■ MM will supplement FTI’s expertise in contract negotiation through assessment of the operational and technical risks within the contracts.</div>

 **FTI**
CONSULTING

M
MOTT
MACDONALD

Overview of the FTI Consortium

Select FTI Biographies

Ellen Smith



Engagement Lead
Senior Managing
Director
Boston, MA

617.747.1871

Ellen.Smith@fticonsulting.com

Ms. Smith joined FTI Consulting' in 2013, continuing 30+ years of operational experience in the energy sector. She has expertise in the engineering, construction, procurement, system operation, and maintenance of electric T&D, gas T&D, LNG and power generation systems and refinery/petrochemical plants. Ms. Smith's areas of expertise include matters with respect to electric utility and power plant transactions, operations, power reliability, utility regulatory strategy, emergency response, strategic communications, and operational cyber security. Since joining FTI Consulting Ms. Smith was the Operations Advisor to the Puerto Rican Electricity Authority during their initial financial restructuring activities. Ms. Smith acted as managing member of the Greenleaf Power projects in California for 18 months until the plants were successfully sold.

John Cochrane



Utility M&A
Senior Managing
Director
Boston, MA

617.747.1737

John.Cochrane@fticonsulting.com

Mr. Cochrane is a Senior Managing Director at Financial FTI Consulting, specializing in advising gas and electric utility clients in all economic, and financial areas of their business. He has more than 30 years of US and international utility sector experience with extensive experience in all areas within corporate finance, mergers and acquisitions, joint ventures, partnerships, restructurings, regulation, gas and electric supply, and business development, both domestic and international. Prior to FTI, Mr. Cochrane worked as Chief Financial Officer and Treasurer for National Grid's U.S. business. He was responsible for mergers & acquisitions, structuring of power purchase contracts, risk management, energy supply, investments, cash management, forecasting & financial analysis and all third-party financing.

David Beckman



Project Finance
Senior Managing
Director
Denver, CO

303.689.8878

Dave.Beckman@fticonsulting.com

Mr. Beckman has over 30 years experience in assisting companies, serving as CRO and representing creditors, debtors and other interested parties facing the demands of either a financial or operational restructuring over the last twenty years. These cases have covered a broad array of industries including: mining (coal, copper, gold, uranium, etc.); manufacturing; trading uranium; and financial services. Mr. Beckman has served as a testifying expert in numerous cases addressing issues as diverse as plan feasibility and appropriate interest rates for various transactions. Prior to joining FTI (as a part of FTI's acquisition of the business reorganization services practice of PricewaterhouseCoopers) he had acted as service leader for the Chicago practice; national mining restructuring leader, and had been a partner for nine years.

RJ Arsenault



Engagement
Manager
Managing Director
Boston, MA

617.520.0276

Rj.Arsenault@fticonsulting.com

Mr. Arsenault is a Managing Director in the Clean Energy Group within Corporate Finance & Restructuring and is based in Boston, Massachusetts. Mr. Arsenault has spent a combined 15 years in the energy and financial sectors. His expertise in the electricity industry covers each facet of the investment cycle from target identification and evaluation to commercial optimization asset portfolios. Mr. Arsenault interacts directly with senior management of client companies, adding value through business advice, regulatory strategy and transaction support. Mr. Arsenault is responsible for coordinating, managing and delivering to clients sound analytical solutions to help them make informed, accurate, investment decisions. In this role, he couples investment valuation expertise across North America with extensive experience in the commercial optimization of power assets in a deregulated

Chelsea Osinchuk



PPP Evaluations
Senior Consultant
Boston, MA

617.520.0256

Chelsea.Osinchuk@fticonsulting.com

Ms. Osinchuk is a Senior Consultant in FTI's Power & Utilities group. An economist by background, she has specialized knowledge in electricity and gas regulation, cost of capital analysis, infrastructure transactions, market design and policy analysis. Ms. Osinchuk was involved in the development of Great Britain's PPP-style offshore wind transmission regime, including undertaking an initial cost-benefit analysis of the regime, evaluating private investor bids for transmission links from prequalification and RFP stages through to Financial Close and redeveloping the public procurement process for offshore wind infrastructure developers. Prior to joining FTI in 2018, Ms. Osinchuk worked as an Economist for Cambridge Economic Policy Associates in London, UK and in the capital markets division of a large multi-national investment bank.

Ana Heeren

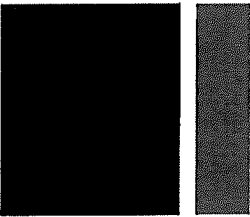


Stakeholder
Outreach
Senior Managing
Director
Washington, DC

202.346.8824

Ana.Heeren@fticonsulting.com

Ms. Heeren leads FTI Consulting's Latin America and Caribbean offering within Strategic Communications and brings deep experience and a global perspective to the practice. She has developed comprehensive external and internal communication plans, public relations strategies and stakeholder engagements in places such as Spain, Brazil, Mexico, Peru, Puerto Rico, the UK and the US. Most recently, Ms. Heeren provided communications counsel to the Government of Mexico as it renegotiated the modernization of the North American Free Trade Agreement. She has also recently provided support to PREPA as it renegotiated its debt with creditors and worked to transform its infrastructure. Ms. Heeren is fluent in Portuguese, Spanish and English and proficient in Italian.



Overview of the FTI Consortium

Select Mott MacDonald Biographies

Jared Hicks, PE



T&D, Renewable & Conventional
Generation
Senior Project Engineer
Plymouth, MI

810.428.6399

Jared.Hicks@mottmac.com

Mr. Hicks is a Senior Project Engineer in Mott MacDonald's Renewable Energy Group. Mr. Hicks has over 14 years of experience in the civil and geotechnical engineering fields, primarily for traditional power generation, power delivery, oil and gas, solar PV, and wind projects. Civil engineering experience includes design of storm water management systems, erosion and sediment control, sustainable site features, and coastal engineering. Geotechnical engineering design experience includes geotechnical investigations, shallow and deep foundations, earth retention systems, and ground improvement methods. Mr. Hicks has also provided field construction support for civil, structural and geotechnical aspects of projects.

Josh Berkow, PE



T&D, Renewable & Conventional
Generation
Senior Electrical Engineer
Plymouth, MI

781.915.0021

Josh.Berkow@mottmac.com

Mr. Berkow is a Senior Project Engineer in Mott MacDonald's Renewable Energy Group. Mr. Berkow is an experienced power engineering professional specializing in solar energy, wind energy, energy storage, and substations in the US and internationally. He has worked for independent power producers, utility consultants, and research laboratories. He has experience in the planning, development, engineering, procurement, project management, cost estimation, and construction of wind plants, PV plants, battery storage systems, substations, and transmission lines.

Keith Paul



Renewable & Conventional
Generation
Senior Mechanical Engineer
Westwood, MA

781.636.4070

Keith.Paul@mottmac.com

Over Mr. Paul has 27 years of consulting, design, and development experience of power generation systems and subsystems on plants located around the world. Development of initial project heat balances, P&ID's, system descriptions, technical specifications, general arrangement drawings, and detailed designs in support of projects from the consulting stage through start-up, testing, commissioning, and operations. Consulting services includes review of project detailed design documentation, technical specifications, and performance criteria to ensure target performance and financial goals are achieved.

Mott MacDonald will act as a subcontractor to FTI. FTI will coordinate all project management tasks, collate all analysis and recommendations and finalize all deliverables on behalf of the FTI Consortium. FTI task managers will act as liaison between the FTI Consortium and the Authority and other key stakeholders. Full biographies for both the FTI and Mott MacDonald team members are provided from Page 33.

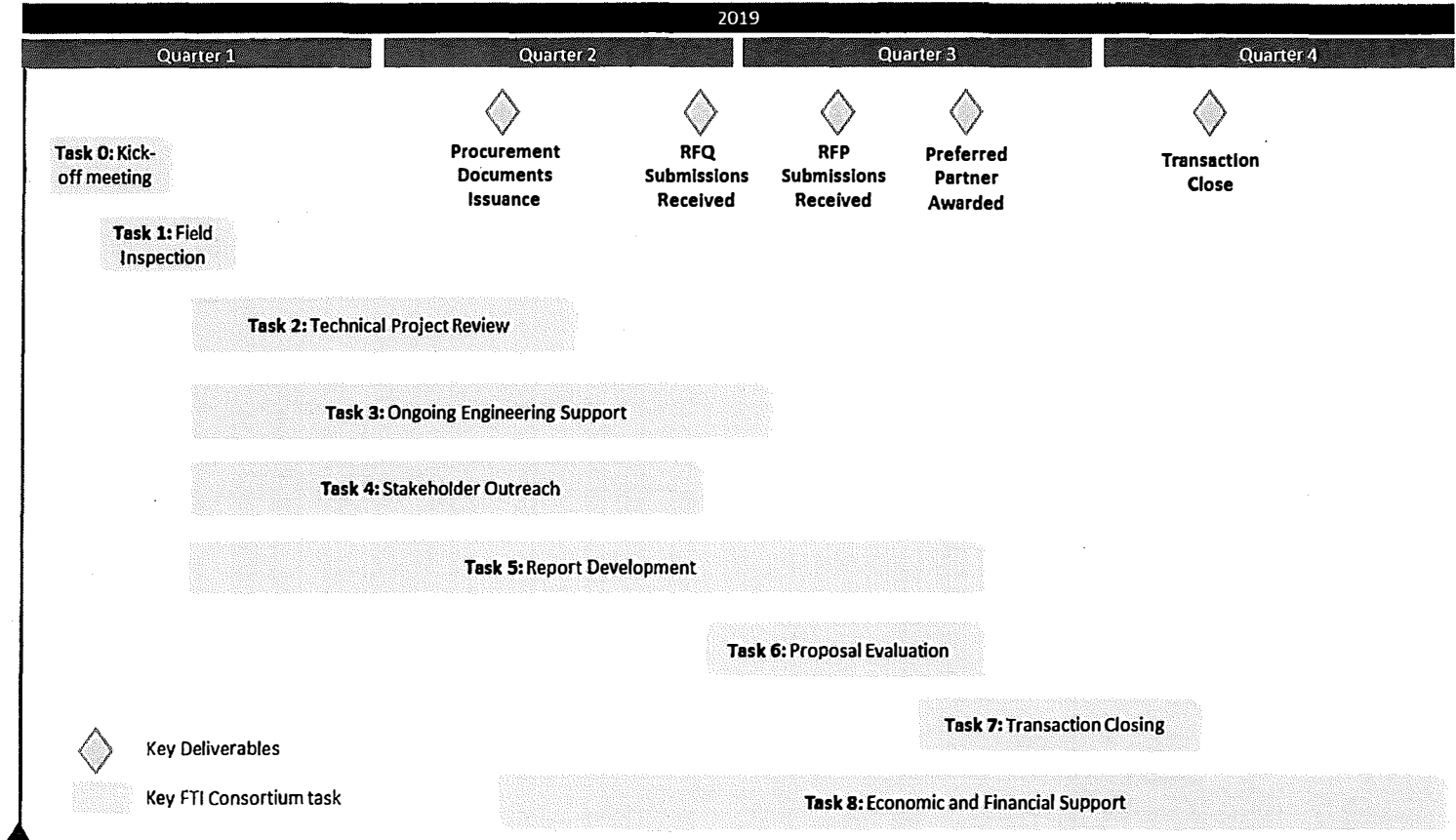
Approach to Scope of Work

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Approach to Scope of Work

Overview of Tasks

- The FTI Consortium has prepared an indicative timeline for a PPP procurement process similar in nature to the Authority's existing T&D procurement process, which we understand is underway. The timeline below can be amended to suit the subsequent PPP initiatives including the Generation process expected to begin in Q2 2019.
- In the slides that follow, we introduce our proposed approach to undertaking the Scope of Work. While we intend to apply a similar procurement approach to each PPP project, we emphasize that the description of proposed work relies on the assumption that the T&D procurement process will be replicated across generation and other projects.



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Approach to Scope of Work

Task I: Field Inspection - T&D

Description

- Field inspection of PREPA assets including transmission centers, distribution substations, transmission and distribution lines and poles/towers will require reviewing operational and historical asset data and any recent upgrades and/or temporary work that has been done as a result of Hurricanes Maria and Irma, validating assessment summaries and identifying potential capital expenditure requirements to the assets, particularly related to the integration of renewables and a transformation to a mini-grid/central grid strategy that is more resilient and reliable.⁽¹⁾

Approach

- The FTI Consortium proposes to conduct an extensive field inspection plan to facilitate the T&D procurement process, as described below. This process can be scaled up or down depending on existing documentation and operational performance/KPIs, including reliability data and trends (CAIDI, SAIFI, SAIDI)⁽²⁾ and safety performance information that is available.
- Review Emergency Response plans and control room protocols and performance.
- Gather and analyze the historical operational data pertaining to the operations and maintenance of existing assets:
 - Validate information provided in the existing studies and assessments.
 - Review current operations and maintenance staffing and comment on its adequacy to operate at industry standard levels.
 - Develop strategies for site walkdowns and inspections and develop a risk-based prioritization methodology.
- Execute site walkdowns and inspections of facilities and equipment:
 - Conduct walk-downs of transmission centers and distribution substations and lines (via driving, documents and other studies).⁽³⁾
- Analyze results of inspections and reports regarding the condition of the assets and recommended and required maintenance needed as well as the challenges with transforming the current system to a future distributed system of MiniGrids with substantial renewable resources.
- Provide a view of the capital expenditure plan to address all areas of the IRP for the T&D system.

Key Deliverable

- The key deliverable for the Field Inspection task is a summary report of the condition of PREPA's operational T&D assets and a capital expenditure plan.

Relevant Experience (see Qualification Section for case studies)



**Public Service
Commission**

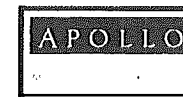
T&D Operations Audit

nationalgrid

T&D Operations Audit

**BERNHARD
CAPITAL PARTNERS**

T&D Due Diligence



T&D Due Diligence

Notes:

(1) Commonwealth of Puerto Rico Public Service Regulatory Board, Puerto Rico Energy Bureau Docket: CEPR-AP-2018-0001, PREPA's Motion for a Limited Time Extension (to Feb 12, 2019) for the IRP Filing and attached Draft IRP, dated Jan 22, 2019.

(2) System Average Interruption Index (SAIDI), System Average Interruption Frequency Index (SAIFI), Customer Average Interruption Duration Index (CAIDI) per IEEE 1366.

(3) Helicopter inspections are not included at this time but may be necessary for some transmission lines.

Approach to Scope of Work

Task I: Field Inspection - Generation

Description

- Field inspection of PREPA generation plants and assets will require reviewing operational and historical data and any recent upgrades that have been completed as a result of Hurricanes Maria and Irma, validating assessment summaries and identifying potential capital expenditure requirements to the assets.

Approach

The FTI Consortium will follow an extensive field inspection plan to facilitate the procurement process across generation assets, described below. This process can be scaled up or down depending on existing documentation and operational performance of assets.

- Gather and analyze historical operational data pertaining to the operations and maintenance of existing assets.
- Validate information provided in the existing studies and assessments including the draft IRP.
- Review current operations and maintenance staffing and comment on its adequacy for operation at industry standard levels.
- Develop strategies for site walkdowns and inspections and develop prioritization methodology.
- Execute site walkdowns and inspections of facilities and equipment:
 - Review operational KPIs including outage and failure issues and trends, safety, environmental performance.
- Analyze results of inspections and reports regarding the condition of the assets and recommended and required maintenance.
- Assess the current capital expenditure plan to address recommended and required maintenance, upgrades, reinforcements, and replacement of equipment following an industry standard safe work practices and methodologies.

Key Deliverable

- The key deliverable for the Field Inspection task is a summary report of the condition of PREPA's operational generation assets and a capital expenditure plan.

Relevant
Experience



Public Utility Restructuring

Greenleaf ENERGY

Generation Strategic Advisory

BERNHARD
CAPITAL PARTNERS

Generation Due Diligence



Renewable Generation Due Diligence

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Approach to Scope of Work

Task II: Technical Project Review

Description	<ul style="list-style-type: none"> Review data and design alternatives and assist in interpretation of all technical information within RFQ, RFP and associated documents discussed during the negotiation process, including defining objectives scope and desired outcomes, evaluating and analyzing information from field studies, estimating project schedules, assessing O&M innovation and reviewing technical and financial case studies.
Approach	<p>Technical review of PREPA’s operational T&D and generation assets in addition to new generation projects throughout the procurement process will form a core component of the FTI Consortium’s evaluation approach for PPP projects.</p> <ul style="list-style-type: none"> The technical evaluation team will help define the PPP parameters and draft the RFQ and RFP documents. The team will review bidder submissions and evaluate the analyses provided on the existing equipment operating conditions and field studies and will review bidder submitted schedules and estimates. Identify risks associated with bidder proposals and implementation strategies and propose risk mitigation strategies. Develop case studies analyzing proposed technology implementation methodologies in environments similar to those that will be experienced in PREPA including technical and financial structures.
Key Deliverable	<ul style="list-style-type: none"> The key deliverable is a memorandum summarizing the FTI Consortium’s recommendations as to optimal design alternatives. The results of technical review will also feed into proposal evaluation deliverables described in Task VI.

Relevant Experience



T&D Operations Audit

ExGen Texas Power, LLC

Financial Advisor Generation Restructuring

BERNHARD
CAPITAL PARTNERS

T&D Due Diligence



T&D Due Diligence

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Approach to Scope of Work

Task III: Engineering Support

- Description

Approach

Key Deliverable

Relevant Experience
- Provide engineering support services for special technical issues for due diligence process such as: structural, geotechnical, instrumentation, environmental compliance issues, permitting and others.
 - The FTI Consortium will utilize its engineering expertise to provide technical due diligence support across operational PREPA assets including generation, transmission, substations, and distribution networks and potential new projects related to renewable generation.
 - We envision engineering support requests will be administered in an ad hoc manner by the Authority. As such, the FTI Consortium will develop an appropriate methodology to provide the necessary level of support once the task is identified, utilizing our global expertise across functional areas in power generation, transmission and distribution.
 - In addition to ad hoc assignments, our engineering support will also feed into other tasks throughout the procurement process including:
 - **Task I:** Field inspections and assessments of existing PREPA generation and T&D assets.
 - **Task II:** Technical project review to define PPP parameters and draft technical aspects of procurement documents.
 - **Task V:** Report preparation incorporating technical insights across various tasks.
 - **Task VI:** Bidder evaluation across all technical aspects of RFQ and RFP submissions.
 - The key deliverable of the Engineering Support task is preparation of memorandums and analyses as needed by the Authority and associated deliverables in tasks for which engineering support is required.

nationalgrid

ExGen Texas Power, LLC

BERNHARD
CAPITAL PARTNERS



T&D Operations Audit Financial Advisor Generation Restructuring T&D and Generation Due Diligence T&D and Generation Due Diligence

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Approach to Scope of Work

Task IV: Stakeholder Outreach

Description

Approach

- Preparation of materials and participation in meetings with potential investors, sponsors, stakeholders, government agencies and other consultants to discuss proposals and project-related information and to finalize PPP structure details ahead of the evaluation process.
- FTI's communications specialists will be involved at each step of the outreach process to effectively articulate project parameters and PPP-structure, best position the opportunity among potential bidders and investors, and build support for the project more broadly.
- As a key first step, the FTI Consortium will work with the Authority to define the objectives, goals and risks associated with the PPP initiative. This data will inform subsequent positioning for the transaction as well as the related communications plans.
- Leveraging findings from the field inspections and technical review, the FTI Consortium will build positioning documents, data room resources and meeting agendas to maximize the efficacy of workshops with investors, sponsors and other stakeholders and accelerate progress toward the desired transaction. Members of the FTI Consortium can moderate workshops on behalf of the Authority and will be available to answer any questions that may arise during the bidding process.
- Parallel to this effort, the FTI Consortium will distill findings to provide regular updates to government agencies, consultants and other relevant stakeholders to ensure alignment and broad support for the effort. Drawing on prior experience working with these groups, our team will anticipate and prepare for potential questions and criticisms to maximize credibility of the Authority throughout the process.
- The FTI Consortium will develop detailed scenario plans to prepare for public leaks of information or criticisms from key influencers that could test the risk tolerance of potential bidders and investors or otherwise jeopardize the process. Response strategies may include the use of industry experts or key officials refuting erroneous information, media engagement and/or one-on-one discussions with key influencers.
- Feedback from all forms of stakeholder engagement will be compiled and considered when finalizing design and procurement documents.
- As the eventual transaction is announced, the FTI Consortium can develop a detailed launch strategy to win support from the broader public and facilitate a smooth transition to the intended PPP structure.
- The key deliverable is preparation of stakeholder communications and workshop documents, participation in stakeholder meetings and the broader management of public perception in ways that protect the process.

Key Deliverable

Relevant Experience



Transmission PPP Evaluation



Strategic Communications for Public Utility

GDB

Strategic Communications for GDB

Approach to Scope of Work

Task V: Report Development

Description

Approach

Key Deliverable

Relevant Experience

- Preparation and participation in presentations for the decision makers concerning the PPP; preparation of reports, recommendations, letters, memoranda and other documentation as required.
- The FTI Consortium will prepare formal and informal documentation for each of the specified tasks across various platforms as requested by the Authority, including presentations, formal reports and excel models in a clear and concise manner targeted at key stakeholders including the Authority, potential bidders, other governmental agencies and PREPA.
- In addition to informal presentations and discussions that will occur over the course of the procurement process, the FTI Consortium will prepare the following deliverables associated directly with tasks:
 - **Task I:** Report summarizing the key takeaways of review of the electric system assets (T&D, generation, customer call center) and capital expenditure report.
 - **Task II:** Memorandum summarizing FTI's recommendations for optimal design alternatives.
 - **Task III:** Ad hoc memorandums and analyses as needed.
 - **Task IV:** Presentation deck for stakeholder engagement to facilitate project design discussions.
 - **Task VI:** Report summarizing scorecard results and evaluation methodology supporting a recommendation for Private Partner award.
 - **Task VII:** Excel modelling analyses and presence in contract negotiation.
 - **Task VIII:** Excel modelling analyses and memorandum summarizing results of analyses.
- The FTI consortium is also prepared to participate in in-person meetings and presentations as requested by the Authority.
- The formal and informal reporting structures defined in each project task will form the key deliverables for the Report Development task.



Transmission PPP Evaluation



Public Utility Restructuring



Strategic Communications for Public Utility








T&D and Generation Due Diligence

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Approach to Scope of Work

Task VI: Proposal Evaluation

Description	<ul style="list-style-type: none"> Assist and advise the Authority in the procurement process through supporting the RFQ and RFP processes, evaluating proposals for technical & financial compliance and undertaking technical, operational and commercial due diligence, culminating in the recommendation for Preferred Partner and additional negotiation and analytical support through to license transfer.
Approach	<ul style="list-style-type: none"> The FTI Consortium will participate in all tasks leading to the issuance of the RFP documents to assist the Authority in identifying the optimal technical, operational and commercial qualifications required to meet the objectives of the PPP project and to answer any questions posed by potential bidders. In conjunction with the Authority, the FTI Consortium will develop a scorecard that ranks bidders across operational, financial and technical qualifications with appropriate weight placed on price vs. qualitative factors. The scorecard will include threshold questions to ensure all submissions meet a minimum set of requirements. The scorecard will assess the reasonability of each bidders' assumptions, relevant expertise and price in developing their project proposal. In evaluating each proposal, the FTI Consortium will perform a detailed review of all aspects of the bidder's proposal including a review of draft contracts or amendments, an audit of financial models, a review of commitment letters from financial institutions and an evaluation of the proposed management team, among other diligence areas. In the event that a Preferred Partner is not identified through the RFP process, an optional best and final offer stage will be added. Each evaluator will be responsible for reviewing every proposal in the evaluator's qualified area. In addition, one evaluator will be nominated as lead moderator, responsible for ensuring that each proposal is evaluated consistently across all scorecard metrics. Further, the lead moderator will resolve any uncertainties between scoring, sense check all evaluations and lead the development of the report. The evaluation team will provide updates to the Authority at regular intervals during the evaluation period including (1) an initial red flag report, (2) preliminary scoring results and (3) a final report with a recommendation of the Private Partner.
Key Deliverable	<ul style="list-style-type: none"> The key deliverable is the recommendation for Private Partner, supported by a report documenting scorecard results and evaluation methodology, in addition to interim evaluation reports synthesized across technical, operational and commercial criteria.

Relevant Experience	<div>      </div> <div> <div>Transmission PPP Evaluation</div> <div>Public Utility Restructuring</div> <div>T&D Operations Audit</div> <div>Financial Advisor Generation Restructuring</div> </div>
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Approach to Scope of Work

Task VII: Transaction Closing

Description
Approach
Key Deliverable
Relevant Experience

- Assist the Authority in reaching financial close for the PPP projects including participating in negotiations, liaising with financial institutions, attorneys and other stakeholders and ensuring appropriate financial risk mitigation measures are executed.

Contract Negotiation

- The FTI Consortium will represent the Authority in liaising with the PPP counterparties and their advisors to ensure a seamless transition of asset or operational responsibility to the Private Partner.
- The FTI Consortium will represent the Authority during negotiations of all project contracts including the O&M and asset management agreements, and any arrangements governing initial or go forward capital contributions.
- During negotiations, The FTI Consortium will ensure incentives are properly aligned and risks appropriately shared between the Authority and T&D Operator by benchmarking the terms and conditions of each contract to market based on empirical data and FTI’s experience with similar PPP structures.

Market Risk Mitigation

- As part of the evaluation process, The FTI Consortium will assess bidders’ proposed approach to managing market risk, including interest rate, currency and inflation risks in addition to operational risks. During the transaction closing and license transfer process, The FTI Consortium will ensure the proposed approach is carried out as described in the RFP response and that all necessary risk reduction mechanisms are in the interest of the PPP.
- Depending on the structure of the PPP, market risks may arise due to the length of time between award of Preferred Partner and transaction close/license transfer or beyond financial close for structures that require ongoing capital raising.
- To ensure financial and commercial viability of the project throughout the length of the contract term, the Authority may consider defining a market rate adjustment mechanism to offtake risk from the Private Partner. If such a mechanism is deemed necessary, The FTI Consortium will determine the acceptable range of market movements and devise a formula for calculating any required adjustments.

- The key deliverable is FTI’s participation in negotiations and analysis related to market rate adjustments.
- FTI estimates the Transaction Closing task will require 135 hours.

ofgem

Transmission PPP Evaluation

TONOPAH SOLAR

Publicly Funded Solar Advisory

ExGen Texas Power, LLC

Financial Advisor Generation Restructuring

Approach to Scope of Work

Task VIII: Economic & Financial Support

Description

- Ongoing economic and financial support to the Authority throughout the entire procurement process as needed. This analysis will comprise transaction support, financial and commercial due diligence, cost of capital analysis and restructuring support.

Approach

- The FTI Consortium will provide ad hoc support to the Authority as necessary on various topics spanning our financial and economic expertise. This may include but is not limited to capital markets research, financial modelling support, auction design insights or procurement strategy analysis.
- In addition to ad hoc analysis, the FTI Consortium will provide the following economic and financial support associated directly with tasks:
 - **Task V:** To the extent required, FTI will prepare economic and financial analyses to support report development.
 - **Task VI:** During the proposal evaluation phase, FTI will undertake financial assessment of bidders' proposed approach to funding and risk mitigation including ensuring that all minimum experience thresholds are met. We can perform model audits and capital markets assessments to sense check the viability of the offer.
 - **Task VII:** FTI will develop economic models to assess the incentives and associated risks to both the Preferred Partner and the Authority as the terms and conditions of the underlying contracts are being negotiated.

Key Deliverable

- The key deliverables for this Task will be determined based on the nature of the analysis undertaken but will likely include analysis in the form of excel model with accompanying memorandum to provide a summary of the analytical results.
- FTI estimates the Transaction Closing task will require 175 hours.

Relevant Experience



ofgem

ONCOR

Energy
Future
Holdings

TONOPAHSOLAR

Transmission PPP Evaluation Financial Advisor T&D Restructuring Financial Advisor Generation Restructuring Publicly Funded Solar Advisory

Financial Proposal

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Financial Proposal

Estimated Hours and Fees – T&D Procurement Process

- The FTI Consortium has prepared an illustrative financial proposal for the entirety of the T&D Concession process. While we understand that the T&D procurement process is underway, the financial proposal below can be amended to suit the subsequent PPP initiatives including the Generation process expected to begin in Q2 2019. Task scopes can be expanded or contracted based on the specific PPP project design and each task can be undertaken in isolation or in combination with other tasks.
- The rates for each team member are included in the table to the right. For the T&D procurement process, the FTI Consortium is proposing blended rates for FTI and Mott Macdonald of \$625/hour and \$208/hour, respectively.
- Our estimated budget to undertake the hypothetical T&D procurement process from Task I to Task VIII including fees and expenses is \$992,600.

Rates by Team Member	\$/hr
<i>FTI Consulting</i>	
Ellen Smith - Senior Managing Director	\$1,050
John Cochrane - Senior Managing Director	\$905
Dave Beckman - Senior Managing Director	\$1,075
Ana Heeren - Senior Managing Director	\$905
RJ Arsenaault - Managing Director	\$800
Chelsea Osinchuk - Senior Consultant	\$515
Zach Papas - Senior Consultant	\$480
<i>Mott MacDonald</i>	
Josh Berkow - Senior Electrical Engineer	\$250
Jared Hicks - Senior Project Engineer	\$200
Keith Paul - Senior Mechanical Engineer	\$180

T&D Procurement Illustrative Budget	Rate (\$/hr)	Estimated Hours Per Task								Total
		Task I	Task II	Task III	Task IV	Task V	Task VI	Task VII	Task VIII	
FTI Consulting	\$625	125	105	20	145	175	370	160	170	1,270
Mott MacDonald	\$208	280	190	210	30	15	30	0	0	755
Total Hours		405	295	230	175	190	400	160	170	2,025
Total Fees (\$)		\$136,295	\$105,097	\$56,127	\$96,857	\$112,491	\$237,482	\$100,000	\$106,250	\$950,600

	Rate (\$/trip) ⁽¹⁾	Estimated Person Trips Per Task								Total (\$)
		Task I	Task II	Task III	Task IV	Task V	Task VI	Task VII	Task VIII	
Travel to the Authority		6	3	6	3	3	0	3	0	
Total Expenses	\$1,750	\$10,500	\$5,250	\$10,500	\$5,250	\$5,250	\$0	\$5,250	\$0	\$42,000
Total Estimated Budget - T&D Procurement Process		\$146,795	\$110,347	\$66,627	\$102,107	\$117,741	\$237,482	\$105,250	\$106,250	\$992,600

Notes:

(1) Assumes a three-day trip.

Financial Proposal

Estimated Hours and Fees – Total Procurement

- The FTI Consortium has provided a budget estimate for only the T&D procurement process that is currently underway as the only initiative for which there is a predefined scope. The FTI Consortium is prepared to undertake all tasks or any subset of tasks as the Authority sees fit. However, the approach is leverageable across the other generation-related and call center-related initiatives.
- At the appropriate time, the FTI Consortium would welcome the opportunity to define and provide a fee estimate for any of the other PPP initiatives including the various generation-related projects and the call center. We envision that tasks undertaken for the T&D procurement process would result in synergies for future PPP procurement processes due to the overlapping nature of some elements of tasks, particularly related to our technical assessment of the electric system and capital markets analysis. As stated, the T&D procurement budget would provide a guideline for the pricing of the other initiatives pending the discussion of the scope of work.

		Estimated Budget per Task								
	Rate (\$/hr)	Task I	Task II	Task III ⁽¹⁾	Task IV	Task V	Task VI	Task VII	Task VIII ⁽¹⁾	Total (\$)
Estimated Hours										
T&D Procurement		405	295	230	175	190	400	160	170	2,025
Generation-Related					[TBD]					
Call Center					[TBD]					
Total Hours					[TBD]					
Estimated Fees										
T&D Procurement	\$469	\$136,295	\$105,097	\$56,127	\$96,857	\$112,491	\$237,482	\$100,000	\$106,250	\$950,600
Generation-Related					[TBD]					
Call Center					[TBD]					
Total Fees					[TBD]					

Notes:

- (1) Tasks III and VIII will partially depend on the Authority's need for ad hoc advice. As such, it is difficult to estimate the specific hours required without further discussions with the Authority. The hours and fees estimates provided for these tasks, as with all other tasks, are indicative only and are subject to further negotiation with the Authority.

Qualifications and Relevant Experience

mt
DGM

Qualifications and Relevant Experience

FTI: Procurement of PPP Transmission Assets

ofgem

Evaluation of Offshore Wind Transmission Competitive Tendering

Situation

- Ofgem is responsible for administering the competitive tender process for selection of offshore wind transmission (OFTO) links connecting offshore wind generation around Great Britain to the onshore transmission grid. The successful bidder from the tender process is awarded a guaranteed 20-year revenue stream linked to inflation, creating a PPP-style asset class.
- Private investors submit proposals through two stages of qualifications to acquire, own, operate and maintain the transmission assets. The OFTO bidders are evaluated based on operational experience, financial capability, commercial attractiveness and price.

Our Role

- Members of the FTI team, acted as financial and commercial advisors to Ofgem and managed the group of technical advisors for the operational evaluation.
- Evaluators undertook pre-qualification screening based on past performance of the bidders and consortiums and also acted as lead evaluators for the final round of the bidding process.
- The evaluation considered the bidders' funding strategy, price firmness, insurance policies, contingency planning, decommissioning planning, operational robustness and other key criteria.
- Evaluators reviewed project finance models, legal contracts, commitment letters and all relevant material in the data room, in addition to responding to specific RFP questions from bidders and facilitating stakeholder forums.
- Evaluators also analyzed risk mitigation strategies and calculated the market rate adjustment for material changes ahead of financial close.

Outcome

- Preferred Bidders were identified and projects became operational.

Notes:

(1) All case studies were undertaken by members of the proposed FTI project team however some projects were undertaken for other employers.

ofgem

Design of Public Procurement Process for Transmission Assets

Situation

- The offshore wind transmission PPP-style competitive tender process specifies the pre-qualification rules, dictates the scoring criteria for the RFP stage and establishes the commitment mechanisms to bind bidders through to financial close and has successfully transferred ownership of 17 transmission assets.
- As the industry matures and project becomes more sophisticated, Ofgem sought advice as to whether the procurement process for competitively tendered transmission assets could be improved to better achieve regime objectives of attracting new entrants to the transmission sector, providing better value to consumers and connecting robust transmission assets to renewable sources.

Our Role

- Members of the FTI team were tasked with evaluating the competitive tender process against the stated goals of the regime to determine whether a more suitable procurement process exists and also to consider whether this procurement process would translate into other publicly procured PPP-style energy assets such as onshore transmission networks.
- The evaluation considered project finance trends in bank, bond and institutional financing and the increasing capacity of generating sites against the dynamic of new bidder entry over the preceding tender rounds.
- We proposed a menu of potential amendments to the procurement process across each phase of competitive tendering and recommended core packages that optimally combined these amendments, resulting in a moderate change package option and a significant change option package.

Outcome

- Ofgem implemented the moderate change package option for the sixth tender round.

Qualifications and Relevant Experience

Mott MacDonald: Technical Advisory Services

BERNHARD CAPITAL PARTNERS

Technical Due Diligence for T&D and Generation Assets

Situation

- Bernhard Capital Partners was soliciting a multi-discipline and experienced technical advisory firm to perform a technical due diligence of the electrical generation, transmission and distribution system of the Lafayette Utilities System of the municipal utility for the City of Lafayette, Louisiana.
- Bernhard Capital Partners to submit a proposal to operate and manage the Lafayette Utilities System electrical assets.

Our Role

- Mott MacDonald was contracted to perform a technical due diligence of the electrical generation and transmission and distribution systems of the Lafayette municipal utility.
- The due diligence included the technical evaluation of two thermal generation power plants, a partial ownership in a large coal-fired plant and potential future development of an existing power generation facility.
- The evaluation included the 47 miles of transmission lines and 989 miles of distribution lines and related substation facilities.
- Mott MacDonald evaluation also included environmental existing permit compliance and electrical system environmental facilities conditions.

Outcome

- Mott MacDonald's technical due diligence efforts aided Bernhard Capital Partners to present a \$4.1 billion proposal to operate and manage Lafayette Utilities System electrical assets.



Technical Due Diligence for Renewable and Conventional Generation and Transmission Assets

Situation

- A private equity firm required the conditional review of assets in North America, Europe, and India to evaluate their current condition and operational quality for potential purchase. Follow on work included recommendations for future upgrades and new developments.

Our Role

- Initially a desktop review of several dozen thermal generation with transmission projects and renewable generation assets including onshore wind and solar were evaluated. Sites were then prioritized for more detailed analyses.
- Site visits were conducted on the high priority locations for a more detailed analyses. Prioritizations were based on incomplete data, new technology applications, and overall value to the project.
- Additional data was collected at site and additional areas of focus were identified based on site interviews, site visual inspections, and site data collected for analyses.
- Reports were generated on each site based on data available for each site as well as OEM data on the technologies applied on each location. Technologies included advanced gas turbines, HRSGs, new and old wind turbines, solar PV technologies, and advanced battery technologies.

Outcome

- Technical data was combined with financial data for overall reports on each facility to potentially be purchased.
- Follow-on work after the purchases were closed has included recommended repairs, upgrades and potential new development opportunities for the new owner. This is an ongoing opportunity.

Qualifications and Relevant Experience

FTI: T&D System Technical Evaluation



Management Audit of T&D Operations

Situation

- On behalf of New York Public Service Commission (NYSPSC), FTI undertook a management audit of New York State Electric & Gas and Rochester Gas & Electric.

Our Role

- FTI reviewed all aspects of each utility's Transmission and Distribution (T&D) activities and operations including the companies' Distributed System Integration Plan for compliance to commissions orders.
- Evaluated the companies' T&D organizational design for all operational and engineering functions.
- Audited the companies' Reforming the Energy Vision (REV) project implementation plans to ensure compliance to commission orders and embedded best practices.
- Evaluated the companies' Benefit Cost Analysis methodology and application of the methodology to Non-Wires Alternatives evaluation.
- Evaluated the processes and policies governing Distributed Energy Resource integration into the distribution system (including planning considerations and application process/compliance).
- Evaluated the companies' T&D cyber-security practices and their utilization of industry practices to ensure security of personally identifiable information, and operational security while providing third party access to customer load information.

Outcome

- Provided a detailed report with insights and actionable recommendations to NYSPSC staff and commissioners.



Management Audit of T&D Operations

Situation

- Supported National Grid's preparation for the New York Public Service Commission's management audit.

Our Role

- FTI designed, developed, implemented and administered a Management Audit Preparation Plan to prepare senior leaders across the organization for the anticipated audit.
- Evaluated the company's T&D organizational design for all operational, financial and engineering functions.
- Reviewed the company's T&D Utility of the Future plans including; Reforming the Energy Vision (REV) project implementation plans, AMI deployment readiness and DER integration practices (including planning considerations and application process/compliance).
- Evaluated the company's Benefit Cost Analysis methodology and application of the methodology to Non-Wires Alternatives evaluation.
- Evaluated the company's T&D cyber-security practices and their utilization of industry practices to ensure security of PII, and operational security while providing third party access to customer load information.
- Prepared a management audit strategy, which included a list of over 150 recommendations for their T&D operations along with an implementation/risk management plan to ensure organizational readiness for the company's management audit.

Outcome

- Successfully prepared National Grid's Leadership and Management Audit team for all the relevant topics and key risk area.

Qualifications and Relevant Experience

FTI: T&D Due Diligence

Confidential

Buyer Due Diligence for T&D Utility Services Company

Situation

- Large provider of inspection, maintenance, and restoration services for utility and telecom structures across the U.S.
- Private equity firm was developing acquisition bid for the company.

Our Role

- FTI Consulting performed commercial due diligence for the private equity firm's proposed acquisition bid.
- Identified strategic challenges and opportunities based on knowledge and review of utilities regulations and structure inspection guidelines across U.S.
- Developed a case study for the planning and implementation of an inspection program at a major utility based on prior executive experience.
- Provided a view on the company's value proposition and future growth opportunities.
- Developed a dynamic model to estimate the total available market for wood distribution pole inspection and maintenance in the U.S.
- Performed technology review and identified innovation opportunities, as well as barriers to entry for competitors.

Outcome

- The private equity firm used FTI's analysis and diligence report as a cornerstone in preparing its acquisition bid.



Financial Advisor to Regulated Electric Utility

Situation

- ONCOR is a regulated electric transmission and distribution service provider that serves nearly 10 million customers across Texas.
- ONCOR was a non-debtor affiliate of Energy Future Holdings during EFH's 2014 bankruptcy proceeding.

Our Role

- FTI was retained as financial advisor to the Unsecured Creditors Committee.
- FTI was responsible for evaluating the potential sale and restructuring of ONCOR as a real estate investment trust (REIT).
- As a part of its diligence process FTI performed site visits to all key transmission and distribution assets and undertook a detailed review of the entity's safety, operating, and financial metrics.
- FTI also performed a comprehensive review of ONCOR's go forward business plan including evaluating the economics of the utility in a REIT structure from the perspective of the Debtor estate, the ONCOR shareholders and the impact to its customer base.

Outcome

- Ultimately it was determined the REIT structure would not pass regulatory approval as a result of inequitable sharing of tax savings created by the structure.

Two handwritten signatures in black ink. The top signature is a stylized, cursive "MT". The bottom signature is a more complex, cursive signature, possibly "GAB".

Qualifications and Relevant Experience

FTI: Generation M&A and Due Diligence

ExGen Texas Power, LLC

Financial restructuring for owner/operator of power generation facilities

Situation

- The Company owns five merchant natural gas-fired power plants throughout Texas with combined capacity of over 3,300+ MWs.
- Over the past few years, power prices have declined due largely to a confluence of modest demand growth being outpaced by new supply and declining natural gas prices, resulting in deteriorating revenue and liquidity.

Our Role

- Served as Chief Restructuring Officer and interim management services provider
- Provided oversight and guidance for the marketing of the Debtor's five gas-fired power plants.
- Managed lender diligence and related reporting requirements.
- Developed the 13-week cash flow forecasts, liquidity projections, and weekly cash flow reporting documents.
- Developed the valuation and liquidation analysis to support the Plan of Reorganization.
- Developed the vendor communication plan and advised the sponsor on the global communication strategy.
- Provided general case administration and prepared all bankruptcy related reporting items, including the statement of financial affairs, schedule of assets and liabilities, and monthly operating reports.

Outcome

- Filed Chapter 11 bankruptcy with a consensual path, consisting of a 363 sale of one of the gas-fired plants and a debt for equity swap for the remaining assets via a Plan of Reorganization.

Energy Future Holdings

Financial restructuring for owner/operator of power generation facilities

Situation

- The Company is a highly leveraged generator, distributor, and certified retail provider of electricity in Texas with over \$40 billion of debt at filing.
- Adverse market conditions, primarily a result of the decline in the price of natural gas due to the emergence of natural gas production from hydraulic fracturing of shale, contributed to the decline in profitability and the ability for the Company to sustain its debt burden and liquidity constraints.
- The Company filed for bankruptcy to pursue the restructuring path outlined in a Restructuring Support Agreement.

Our Role

- Perform a full business plan review, analyze and challenge operating forecasts and demonstrate substantial upside opportunity to the plan. This work will form the basis for a detailed valuation of the Company.
- Perform site visits to all coal and nuclear facilities including preparing a report on red flag issues at each site.
- Extensive review of relevant project documents including O&M and asset management agreements, interconnection agreements, supply contracts, etc.
- Review and analyze operating results, liquidity, cash flow forecasts, monthly performance, covenants, and other operating metrics.

Outcome

- FTI created a comprehensive alternative business plan for the generation portfolio that underpinned a successful negotiation with the Debtor estate around the value of the business.

Qualifications and Relevant Experience

FTI: Generation Due Diligence

Confidential

Due Diligence for Renewable Energy Engineering and Construction Firm

Situation

- The company anticipated recording over \$100 million in charges related to delays and other operational challenges at a number of its renewable energy projects
- As a result, the company expected to be in default under its credit agreement and requested an amendment from its Revolving Credit Lenders

Our Role

- FTI Consulting was retained by the Revolving Credit Lenders
- Provided due diligence and in-depth review of six troubled biomass generating resources
- Performed site visits and detailed contract analyses to assess situation and provide view on the path forward for the biomass resources
- Assisted with negotiations of over ten amendments with the Company and other stakeholders, and advising on strategic alternatives and available options
- Provided diligence on five formal business plans, interviewing management and performing in-depth reviews of underlying business assumptions
- Performed regular diligence of the Company's liquidity forecasts and stressing related assumptions
- Reviewed and assessed the nature and value of the Company's assets, assisting in the expansion of liens on previously unencumbered collateral

Outcome

- As of Q1 2019, FTI remains engaged as the Financial Advisor to the Lenders, and has successfully assisted in expanding the Lenders' collateral base while significantly de-risking their exposure through a material reduction in facility size

Greenleaf ENERGY

Strategic Advisory Services for Owner of Two 49MW Cogeneration Facilities

Situation

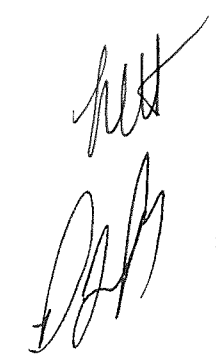
- Presently the Client is the lessor in a sale-leaseback arrangement with an independent power producer.
- The lease was set to expire on June 30, 2015, at which time the Client needed to prepare to assume ownership of the assets.

Our Role

- FTI was hired as strategic advisor to the lessor and tasked with advising the Client through the lease transition as well as evaluating all strategic alternatives including running an asset sale process or owning and operating the assets.
- Reviewed the business plan associated with the assets, prepared an integrated fully functioning financial model to evaluate cash flows and value of the assets.
- Oversight of the hiring and work product of the independent engineer tasked with identifying asset condition requirement upon lease expiration.
- Ran a RFP process for third party operations and asset management providers including developing the RFP documents, evaluating proposals, and leading contract negotiations with successful bidders.

Outcome

- The assets were successfully transitioned back to the Client in accordance with the lease transition requirements and prudent utility practices.



Qualifications and Relevant Experience

FTI: Utility Restructuring



Financial Restructuring for Government Development Bank (GDB) and PREPA

Situation

- The GDB of Puerto Rico was concerned about liquidity issues at PREPA and specifically about PREPA's ability to stay current on debt service obligations.

Our Role

- Initially FTI Consulting was retained by GDB to assess near term liquidity issues and was subsequently hired by PREPA to work side-by-side the PREPA management team.
- Developed a 13-week cash flow and enterprise valuation models
- Negotiated forbearance agreements with bond holders. Led bondholder facility tours.
- Reviewed and prioritized all vendor payables
- Reviewed and modelled all O&M and Capital Program Spending and implemented recommendations to selectively reduce.
- Working with PREPA, renegotiated all fuel contracts to avoid liquidity issues and to ensure that there was no interruption of service to customers.
- Conducted a detailed study of the outstanding customer receivables along with recommendations to reduce DSO.
- Conducted a Process Improvement and Cost Reduction Study and identified multiple initiatives, many of which were implemented.

Outcome

- GDB used FTI's report on liquidity and debt capacity issues to develop a financial strategy centered around a consensual restructuring satisfying key constituents, creditors, and bondholders.
- On FTI's recommendation, PREPA instituted operational improvements resulting in significant capex and operational expense savings.



Financial Restructuring for Merchant Nuclear and Fossil Generator

Situation

- FirstEnergy Solutions Corp. and its subsidiaries, and FirstEnergy Nuclear Operating Co. (collectively, "FES") filed for bankruptcy on March 31, 2018. FES was a wholly owned subsidiary of FirstEnergy Corporation ("FE Corp."), a Fortune 100 energy company, and maintained its own capital structure which included nearly \$2.8 billion of third party funded debt. FES owns and operates merchant nuclear and fossil generation as well as a retail business.
- Factors leading to the bankruptcy included: declining PJM wholesale power prices; abundance of cheap natural gas driving electricity prices lower; and public policy initiatives and incentives continuing to promote the development of additional wind capacity, placing downward pressure on wholesale power prices.

Our Role

- FTI was retained as financial advisor to the Unsecured Creditors' Committee.
- FTI assisted with negotiations among FE Corp., the Debtors and ad hoc creditor groups on various key topics thus far, including:
 - The PJM bidding strategy for the upcoming 2021 PJM Capacity Auction.
 - Investigation of various causes of action against FE Corp.
 - The Settlement Agreement between FE Corp. and FES, which includes due diligence on one additional FE Corp. power plant (Pleasants).
 - The contested nuclear key employee retention plan (i.e., FENOC KERP).
 - The business plan and evaluation of various sale opportunities.
 - The Plan Support Agreement.
- FTI also provided services and analysis with respect to the following areas: employee incentive programs, nuclear license transfer, external affairs strategy/nuclear subsidies, intercompany PPAs, deactivation scenarios, and unsecured claims evaluation.

Outcome

- The matter is ongoing.

Qualifications and Relevant Experience

FTI: Financial Structuring for Public Agencies



Structuring of Private Operations Contract with Public Power Authority

Situation

- The Long Island Power Authority (LIPA) is a municipal subdivision of the State of New York that owns the electric transmission and distribution system serving Long Island. National Grid operated and managed all aspects of the system for LIPA pursuant to a long term T&D services contract. In addition, LIPA purchased all of the output of National Grid owned power plants on Long Island (over 5000MWs) pursuant to a long term purchase power contract.

Our Role

- Members of the FTI team were Senior Executives at National Grid from 1997 – 2013 with oversight responsibilities for these contracts and assets.
- Managed a T&D workforce of approximately 3000 people and a generation workforce of over 1000 employees.
- Operated and maintained the T&D system and planned future capital expenditures.
- Responsible for outage management and restoration, emergency planning and management, regulatory interfaces, system planning and all metering and customer billing.
- Prepared all capital and operation & maintenance budgets and managed system to a detailed set of reliability and customer performance metrics per the contracts.
- Responsible for scheduling of generation and economic dispatch, operation and maintenance of and capital expenditures for the power plants. Complied with all environmental standards. Assisted LIPA in fuel decisions, interactions with the NYISO and retirement/new build decisions.

TONOPAH SOLAR

Interim President, Treasurer and COO of Solar Thermal Power Project

Situation

- Tonopah Solar Energy (TSE) is the owner of a 110 MW utility scale concentrated solar power (CSP) facility located in Tonopah, NV. The project received a \$737m loan from the Department of Energy (DOE) as part of the DOE Title XVII loan program.
- The plant experienced 4+ years delays in construction and generated at less than 10% of expected performance prior to FTI's involvement. Multiple legal and commercial disputes had arisen because of the plant's operating issues and complicated ownership, investment and governance structure.

Our Role

- Retained as interim managers of the Company, holding the titles of President, Treasurer and Chief Operating Officer, among others.
- Created Project Management Office (PMO) for on-site activities to facilitate completion of construction rectification projects and to optimize operating performance.
- Performed analysis of the Company's short-term and long-term liquidity position, submitted a revised budget to investors and the DOE and provided oversight of the asset management function of TSE.
- Ensured compliance with the DOE loan agreement and with the power purchase agreement (PPA) with the electricity off taker, Nevada Energy (NVE). Led complicated negotiations with both parties.
- Acted on TSE's behalf in commercial negotiations and litigation disputes.

Outcome

- The matter is still ongoing. However, in FTI's time as the interim managers, the plant's operating performance has improved to more than 70% of expected performance (on a monthly basis), the Company has negotiated solutions to critical legal and commercial disputes, and TSE has improved its commercial position relative to its agreements with the DOE and NVE.

Qualifications and Relevant Experience

FTI: Stakeholder Outreach

GDB

Strategic Communications for Government Development Bank

Situation

- FTI's US-based Strategic Communications team worked alongside Corporate Finance and Economic Consulting colleagues to help guide the Government Development Bank of Puerto Rico ("GDB") through its historic debt crisis. More specifically, the GDB engaged FTI Strategic Communications to develop a strategy to explain and build public support for the Puerto Rico Public Corporations Debt Enforcement and Recovery Act, a new law that provides a clear legislative framework for Commonwealth public corporations that are experiencing severe financial stress to overcome their financial obstacles through an orderly, statutory process.

Our Role

- The FTI Strategic Communications team leveraged the firm's crisis, public affairs and restructuring expertise to lead and counsel Commonwealth officials as well as a large team of legal, banking, policy, political and communications advisors. FTI developed messaging and engagement strategies to simply and succinctly explain the need for and key provisions of the Recovery Act to critical stakeholders. The program sought to gain public and legislative support for the Recovery Act while also protecting public corporations that may or may not choose to use the law from further reputational and financial deterioration.

Outcome

- The announcement of the Recovery Act was successful and reported as the right step toward addressing Puerto Rico's debt and protecting essential services for its citizens. FTI garnered the support of local influencers, opinion leaders, stakeholders and policymakers on and off the Island. The Recovery Act was subsequently approved by the Commonwealth legislature and signed into law by the Governor on June 28, 2014.



Strategic Communications for PREPA Restructuring

Situation

- FTI's US-based Strategic Communications team worked in conjunction with Corporate Finance and Economic Consulting to guide the Puerto Rico Electric Power Authority ("PREPA") as the company evaluated various alternatives to improve its operations and financial situation. FTI Strategic Communications was engaged to facilitate accurate and fair reporting in a volatile media environment, maintain continuity in the supply chain and reassure customers of PREPA's ongoing ability to supply power, irrespective of the final outcome.

Our Role

- The FTI Strategic Communications team, composed of energy, restructuring and public affairs experts, developed proactive and reactive communications strategies that leveraged each milestone in the restructuring process to underscore progress toward a shared goal of rebuilding the company's financial strength while also protecting management credibility in any potential outcome. FTI developed a series of media statements designed to mitigate harmful speculation and accusations from PREPA's opponents and coordinated direct outreach to reassure employees, suppliers and customers of the company's ongoing viability.

Outcome

- Since partnering with FTI, PREPA successfully announced three forbearance agreements with its lenders and appointed a Chief Restructuring Officer, achievements that collectively provide the Company with a consensual path to improve its operations and financial situation. FTI has effectively responded to hundreds of media inquiries to maintain stability even when there was nothing new to share and helped to maintain continuity in the supply chain even as payment terms continued to be stretched. The team's efforts continue as PREPA works to develop and implement a new business plan that will ensure its long-term ability to provide the people of Puerto Rico with a safe, efficient and reliable power supply.

Select Biographies

mt
AB

Select Biographies

FTI: Ellen Smith

Expertise

EPC Infrastructure
Power Generation
LNG Operations
T&D Utility Operations
Regulatory Strategy
Operational Cyber Security

Industries

Energy, Power & Utilities

Professional Affiliations

Member of IEEE

Education

Master of Science -
Power Systems
Union College

Bachelor's of Science in
Mechanical Engineering
Union College

Board Participation

Trustee, Union College,
Schenectady, NY



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About

Ms. Smith joined FTI Consulting's Boston office in 2013, continuing 30+ years of operational experience in the energy sector. Ms. Smith has expertise in the engineering, construction, procurement, system operation, and maintenance of electric T&D, gas T&D, LNG and power generation systems and refinery/petrochemical plants. She has led project teams and managed portfolio projects and conducted extensive risk assessments with respect to E&C and EPC contracts.

Selected Experience

FTI Consulting: (2013-Present)

Ms. Smith's areas of expertise include consulting and advisory matters with respect to electric utility and power plant transactions, operations, power reliability, utility regulatory strategy, emergency response, strategic communications, and operational cyber security. Specifically, since joining FTI Consulting Ms. Smith was the Interim Chief Operations Advisor to the Puerto Rican Electricity Authority (PREPA) during their initial financial restructuring activities. Ms. Smith also acted in the role of managing member of the Greenleaf Power projects in California for 18 months until the plants were successfully sold. Ms. Smith has also worked extensively with CB&I on their EPC contract challenges as well as four additional E&C pipeline and power plant construction companies. Currently, Ms. Smith is on the FTI team working as financial advisor's to Unsecured Creditor Committee in the FirstEnergy Solutions bankruptcy which involves the sale of three coal-fired plants and three nuclear plants.

COO, National Grid US: (2009 - 2012)

Ms. Smith was responsible for all aspects of National Grid's US operations including he physical design, construction, system operation, and maintenance of electric, gas, LNG and power generation systems.

Ms. Smith has participated in various state and ISO planning processes and rate cases with respect to infrastructure. She has also led major storm restoration efforts. Ms. Smith was also the Senior Authorized Person with respect to NERC CIP compliance.

HOVENSA Oil Refinery Power and Utilities Advisor: (2008 - 2009)

Ms. Smith assisted with the refineries power and utilities operations in all aspects of managing their 13 power plants (250 MW in total) and in constructing a new GE Frame 5 cogeneration plant (\$100M project)

President, Pratt & Whitney Power Systems: (2001 - 2002)

Ms. Smith was directly involved in the development, permitting, construction and operations of CALPEAK LLC (100% owned by UTC) and the development and launch of the FT8 Swiftpack program.

GE Energy: (1980-1999)

Prior to Pratt & Whitney, Ms. Smith spent 19 years at GE Power Systems. While at GE Ms. Smith was involved in three large Egypt Power Projects while working for the GE Power Plant Systems Department (PPSD). Ms. Smith also led the GE O&M business, the Parts & Product Service Department and 6 Sigma prior to being named VP, Energy Services Sales.

While at GE, Ms. Smith was involved in the following EPC projects:

- PERC/MERC/Modesto refuse fired Steam-Turbines
- Egypt portfolio: Cairo South, Talkha, Helwan Gas Turbine/Combined Cycles
- Pakistan: Water & Power Authority Gas Turbine /Combined Cycles
- Portfolio of Upgrade Projects to GE's fleet of aging power plants

Select Biographies

FTI: John Cochrane

Expertise

Economic Consulting
Financial Analysis
Transaction Support
Business Strategy

Industries

Energy, Power &
Utilities

Professional Affiliations

PowerOptions, Board
of Directors
EMERA US Subsidiaries,
Member, Board of
Directors

Education

M.B.A., Northeastern
University
B.A. in Biology, Harvard
University



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About

Mr. Cochrane is a Senior Managing Director in the Economic and Financial Consulting segment within FTI Consulting, specializing in advising gas and electric utility clients in all economic, regulatory (EFC), and financial areas of their business. He has more than 30 years of US and international utility sector experience. His extensive experience includes all areas within corporate finance, mergers and acquisitions, joint ventures, partnerships, restructurings, regulation, gas and electric supply, and business development, both domestic and international. Mr. Cochrane has extensive experience testifying in rate case matters relating to capital structure/cost of capital, mergers and acquisitions, and financings before FERC and various state-level regulatory bodies. He has held C-suite and other senior leadership positions at major US utilities and served as a member of the Board of Directors on a variety of energy sector companies including start-ups.

Prior to FTI, Mr. Cochrane worked as Chief Financial Officer and Treasurer for National Grid's U.S. business. He was responsible for mergers & acquisitions, accounting, tax, pensions, insurance/claims, risk management, energy supply, property, investments, cash management, forecasting/budgeting, planning, financial analysis and all third-party financing. In this capacity, Mr. Cochrane managed a 500-person organization with 13 reporting functions.

Selected Experience

- **Financial Restructuring:** Advised the Puerto Rico Electric Power Authority (PREPA) on the restructuring of their debt obligations as well as efficiency improvements to be made to their operations (2014).
- **Rate Case:** Advised PPL Electric Utilities on financial modeling and rate case

strategy on the development of transmission projects in PJM.

- **Merger & Acquisition:** Led all business development, mergers, acquisitions, divestitures, and joint ventures globally, including the sale of a wide range of businesses totaling \$10B, the negotiation of a 15 year, \$4.5B power supply agreement and a long term transmission and distribution contract, both with Long Island Power Authority, and commercial and regulatory negotiations for a \$3B joint venture with six New York transmission owners.
- **Financial Advisory:** Advised Trans Bay Cable, an underwater direct current transmission cable connecting San Francisco to Pittsburg (CA), on the reasonableness and methodology of its return to equity calculation for the rate case.
- **Tax Equity Investments:** Advised noteholders of a turkey litter power plant located in Minnesota in a capital restructuring including negotiation of a proposed tax equity transaction
- **Power Transactions:** Key member of deal team closing a 2.5B generation portfolio in US Northeast. Primarily responsible for portfolio valuation and complementary insights from indicative bid through closing the transaction

Select Biographies

FTI: Dave Beckman

Expertise

Restructuring /
Turnaround Services
Expert Testimony
Business Strategy

Industries

Real Estate &
Infrastructure
Energy, Power &
Utilities
Financial Institutions

Certifications

Certified Turnaround
Professional (CTP)

Education

B.S. in Chemical and
Petroleum Refining
Engineering, Colorado
School of Mines
M.S., A.B.T in Mineral
Economics, Colorado
School of Mines



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About

Mr. Beckman has over 30 years experience in assisting companies, serving as CRO and representing creditors, debtors and other interested parties facing the demands of either a financial or operational restructuring over the last twenty years. These cases have covered a broad array of industries including: mining (coal, copper, gold, uranium, etc.); manufacturing; trading uranium; and financial services. Mr. Beckman has served as a testifying expert in numerous cases addressing issues as diverse as plan feasibility and appropriate interest rates for various transactions.

Prior to joining FTI (as a part of FTI's acquisition of the business reorganization services practice of PricewaterhouseCoopers), Mr. Beckman had been a professional in the Energy Department of the World Bank / International Bank for Reconstruction and Development in Washington D.C.

Selected Experience

- Retained by Consol Energy to assist on the divestiture of a large portion of its coal portfolio to finance its growing natural gas business line. To complete the transaction, the Company needed an independent third party to prepare a fair market value opinion on the five coal mines being sold as well as a solvency opinion of the potential buyer. The five coal mines were sold to Murray Energy in 2013 for approximately \$3.5 billion.
- Retained by secured lenders of an international precious metal mining Company, with operations in the United States and South Africa, to advise on the financial restructuring of the Company. Mr. Beckman lead the FTI team that reviewed and assessed the reasonableness of the Company's short-term (13-week) and longer-term (18 month) projections. Through input from FTI, the Company adjusted its projections for current mining expectations and to include filing for court protections in certain jurisdictions.
- Retained by a copper mining Company to develop and implement a comprehensive recapitalization process. As part of this engagement FTI

updated and expanded the capabilities of the Company's production forecast process; developed a new cash forecasting and reporting process; developed all marketing materials including teasers, information memoranda, and all other necessary materials; and established a virtual data room to provide potential investors with an effective and efficient approach to completing a significant amount of their required due diligence.

- Lead Financial Advisor to the Official Committee of Unsecured Creditors of Asarco, LLC a \$600MM revenue Company and third largest U.S. producer of primary copper products (cathode, rod & cake). Mr. Beckman led a team that advised the Committee on various aspects of issues in the case including: a detailed review of the Company's business plans; implementation of weekly reporting of cash flow and operating statistics; analysis of significant labor issues including costs of an ongoing strike which led to the resolution of the strike; and analysis of employee retention proposals. The Company had a successful emergence from bankruptcy with all creditors paid in full, including the unsecured creditors.
- Served as Lead Financial Advisor to the Senior Bondholders of Grupo Minera Mexico, S.A. de C.V. Managed a multi-disciplinary team of consultants that assisted the Senior Secured Bondholder Group in: analyzing detailed operating information; negotiating the terms of various forbearance agreements while the Company was in a state of default; developing and maintaining a comprehensive cash flow model of multiple mining sites and smelting facilities; estimating the cash infusion necessary to stabilize the Company's operations; calculating make-whole payments; analyzing appropriate interest rates for the restructured bond and bank debt; developing extensive cash flow sweep mechanisms for inclusion in the final restructured debt documents; and, finalizing the ultimate debt restructuring of the bondholders.

Select Biographies

FTI: RJ Arsenault

Expertise

Derivatives Analysis
Econometrics &
Statistical Analysis
Expert Testimony
Business Plan Review
Valuation

Industries

Energy, Power &
Utilities
Real Estate &
Infrastructure

Certifications

Chartered Financial
Analyst (CFA)

Education

M.B.A. with
concentration in
Finance, Boston
University
B.S. with concentration
in Mathematics and
Biology, Fairfield
University



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About

Mr. Arsenault is a Managing Director in FTI Consulting's Corporate Finance segment and is based in Boston, MA. He has spent over 15 years in the energy sector, holding senior positions with global power companies and advising clients owning assets across the sector including conventional and renewable power generation, electric transmission, and midstream pipeline infrastructure.

Mr. Arsenault advises clients on a variety of economic, financial, and strategic issues in power and gas markets across North America. His expertise includes market assessments, economic and financial modeling of contracted and merchant assets, asset valuation and liquidation analyses, in and out of court bankruptcies, and provision of strategic advisory services.

Mr. Arsenault advises investors throughout the entire investment process, including target identification, transaction support, business creation and expansion strategy. He is experienced in valuing enterprises, power assets, power purchase agreements and trade books, tax equity transactions and formulating negotiation strategy for executing transactions.

Mr. Arsenault has played a critical role advising companies, bondholders, and unsecured creditors during Chapter 11 restructurings. During these engagements, he has led teams responsible for reviewing and preparing Debtor business plans, developing cash flow forecasts and associated asset valuations and maximizing the value of the Debtor estate within the power markets in which they operate. Select clients that Mr. Arsenault has served including AES Eastern Energy, Edison Mission Energy, Energy Future Holdings, Northampton Generating, ExGen Texas Power, and FirstEnergy Solutions.

Prior to FTI, Mr. Arsenault held several senior positions with TransCanada

Pipelines, including asset management of its Northeast power portfolio and roles within its M&A group, evaluating investments across North American power markets. Mr. Arsenault is a CFA charterholder and holds a B.A. in biology from Fairfield University and a M.B.A. from Boston University.

Selected Engagements

- **Financial Restructuring:** Advised Unsecured Creditors' Committee of Edison Mission Energy during bankruptcy. Key responsibilities including valuation of EME portfolio, advise clients during negotiation of sale of EME assets, and assessment of liquidity of estate.
- **Renewable Energy:** Has led valuation of assets across the renewable sector, including wind farms, hydroelectric portfolios, and utility scale and behind the meter photovoltaic solar.
- **Tax Equity Investments:** Advised noteholders of a turkey litter power plant located in Minnesota in a capital restructuring including negotiation of a proposed tax equity transaction.
- **Power Transactions:** Key member of deal team closing a 2.5B generation portfolio in US Northeast. Primarily responsible for portfolio valuation and complementary insights from indicative bid through closing the transaction.

Select Biographies

FTI: Chelsea Osinchuk

Expertise

Regulatory Strategy
Cost of Capital Analysis
Econometrics &
Statistical Analysis
Infrastructure Due
Diligence
Business Plan Review

Industries

Energy, Power &
Utilities
Real Estate &
Infrastructure

Education

Bachelor of Commerce
in Finance, Sauder
School of Business,
University of British
Columbia, Vancouver,
Canada
Masters in Economics,
University of British
Columbia, Vancouver
Canada



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About

Ms. Osinchuk is a Senior Consultant in FTI's Power & Utilities Group within Economic & Financial Consulting. An economist by background, she has specialized knowledge in electricity and gas regulation, cost of capital analysis, infrastructure transactions, market design and policy analysis. Ms. Osinchuk has provided economic and financial advice to a diverse set of clients around the world including infrastructure investors, merchant and regulated generation, transmission and distribution companies, utility regulators and government agencies.

Ms. Osinchuk's consulting experience spans the North American, European, Middle Eastern and Asian markets and across the entire energy supply chain. She was involved in the development of Great Britain's PPP-style offshore wind regime, including undertaking an initial cost-benefit analysis of the regime, evaluating private investor bids for transmission links from Prequalification and RFP stages through to Financial Close and redeveloping the public procurement process for offshore wind infrastructure developers.

Prior to joining FTI in 2018, Ms. Osinchuk worked as an Economist for Cambridge Economic Policy Associates (CEPA) in London, UK. She also previously worked in the capital markets division of a large multi-national bank.

Selected Engagements

- **Evaluation of Transmission PPP bids:** On behalf of Ofgem, assessed the commercial, technical and financial viability of private investor bids for Offshore Wind Transmission (OFTO) assets and awarded Preferred Bidder based on analysis; supported Ofgem through to Financial Close of project.
- **Transmission Procurement Design:** Consulted on process improvements for the procurement of PPP-type transmission assets to increase competition bidder entry private infrastructure investors, establish protection to electricity consumers and facilitate strong capital market participation.

- **Electricity Transmission Due Diligence:** Assisted an infrastructure investor with due diligence and cash flow forecasting in support of a contemplated purchase of an HVDC transmission asset in the Northeast U.S.
- **Gas Network Due Diligence:** Assisted a consortium of infrastructure investors with regulatory due diligence for the potential purchase of a gas distribution network in the UK, providing insight into the regulatory environment and future capital market scenarios.
- **Financial Restructuring:** Advised Unsecured Creditors' Committee of FirstEnergy Solutions during bankruptcy. Undertook due diligence of the operating fleet business plans across multiple scenarios. Calculated damages on renegotiated Power Purchase Agreements.
- **Transmission Asset Purchase:** Advised a Northeast U.S. transmission utility on the purchase of an incremental stake in an existing transmission asset. Undertook financial modeling and assisted in building the regulatory case for the acquisition.
- **Cost of Capital Analysis:** Developed a framework for assessing energy networks' true cost of capital. Supported network companies in negotiating with regulators for increased cost of capital allowances. Developed financial models to predict cost of capital mispricing under various regulatory environments.
- **Cost Efficiency Benchmarking:** Applied econometric and unit cost analysis to compare performance of regional monopolist electricity distribution companies across all operating expenditures.

Select Biographies

FTI: Zach Papas

Expertise

Wholesale Electricity
Markets
Power Generation
Asset Management
Power & Utilities

Industries

Energy, Power &
Utilities
Real Estate &
Infrastructure

Education

B.S. Nuclear Engineering
Texas A&M University
M.B.A. Finance
University of Texas at
Dallas



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About

Zach Papas is a Senior Consultant in the Corporate Finance & Restructuring segment at FTI Consulting, based in Dallas, TX.

Mr. Papas has experience in financial modeling and reporting, business plan review, financial statement analysis, and operational and industry due diligence services to companies and creditors. Additionally, he has a strong industry background in Power & Utilities, with emphasis on power generation and marketing.

Mr. Papas has worked on behalf of the revolving credit lenders to a large power generation technologies and services company. He performed a detailed review of strategic business plans, including financial forecasting model analysis. He also developed dynamic models to perform sensitivity analyses to assess the impact of fluctuation in key drivers in the business plans.

Mr. Papas has also worked on various transaction diligence projects, including operational and industry diligence in the Power & Utilities sector which required deep industry knowledge. These projects included a thorough review of federal, state, and local utility regulations, as well as wholesale electricity market rules and regulations across the country. For one such project, he developed a dynamic model estimating the total available market for certain utilities services.

Prior to FTI Consulting, Mr. Papas served in multiple roles, including asset management and market risk analysis at Tenaska Power Services, a wholesale power marketing company. In this capacity, he was responsible for financial optimization and hedging strategies, constructing and evaluating financial models, and managing client relationships. Mr. Papas has provided advice to utilities, municipalities, industrial generators, and independent power producers.

Mr. Papas holds a B.S. in nuclear engineering from Texas A&M University and graduated summa cum laude with an M.B.A. in finance from the University of Texas at Dallas.

Selected Engagements

- **Transmission & Distribution Services Due Diligence:** Performed commercial due diligence for private equity firm preparing an acquisition bid. Developed a dynamic model estimating the total available market for utilities inspection and maintenance services. Provided view on company's value proposition and growth opportunities.
- **Financial Restructuring:** Advised revolving credit lenders to global power generation technologies and services company. Performed business plan review and financial scenario analyses. Developed dynamic financial forecast models.
- **Electricity Services Due Diligence:** Performed commercial due diligence for an investment firm seeking to provide growth capital for an electricity submetering company. Provided view on U.S. wholesale electricity markets and revenue opportunities within various ISO markets and programs. Provided review and analysis of various state utilities and submetering regulations and developed view on strategic growth opportunities and challenges.
- **Generation Portfolio Revenue Optimization** Developed day-ahead market optimization and long-term hedging strategy for a portfolio of wind farms in the Southwest Power Pool. Provided ongoing review and analysis of the program.

Select Biographies

FTI: Ana Heeren

Industries

Energy, Power &
Utilities
Real Estate &
Infrastructure

Education

BA Honors Media
Communications and
Print Journalism

MA Energy Policy and
International Economics



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Strategic Communications

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About

Ms. Heeren leads FTI Consulting's Latin America and Caribbean offering within Strategic Communications and brings deep experience and a global perspective to the practice. She has developed comprehensive external and internal communication plans, public relations strategies and stakeholder engagements in places such as Spain, Brazil, Mexico, Peru, Puerto Rico, the UK and the US.

Most recently, Ms. Heeren provided communications counsel to the Government of Mexico as it renegotiated the modernization of the North American Free Trade Agreement. She has also provided public affairs and media relations support to the pharmaceutical industry as it navigated intellectual property concerns in Latin America and to the Puerto Rico Electric Power Authority as it renegotiated its debt with creditors and worked to transform its infrastructure.

In 2018, Ms. Heeren was named to M&A Advisor's Annual Emerging Leaders list, which recognizes and celebrates the achievements of M&A, Financing and Turnaround professionals who have made notable contributions to their industry and community.

Prior to joining FTI Consulting, Ms. Heeren was a principal at PA Consulting Group's Global Energy practice. While there, she executed diverse management consulting projects, ranging from crafting communications strategies to executing re-organization and process improvement projects to developing highly technical electric utility reliability enhancement plans.

Ms. Heeren has worked with a broad spectrum of clients, including oil and gas majors, electric utilities, regulators, chemical and agricultural companies,

pension funds and private equity firms. She has also worked at Bain & Company in Rome as part of its merger and acquisition due diligence team, and at Llorente & Cuenca in Madrid where she helped clients deal with complex public relations issues and fulfill corporate strategies through public and media relations.

Ms. Heeren holds a B.A. from the University of Westminster in London and an M.A. from Johns Hopkins University School of Advanced International Studies. A proud Brazilian native, Ms. Heeren is fluent in Portuguese, Spanish and English and proficient in Italian.

Select Biographies

Mott MacDonald: Jared Hicks, PE

Expertise

Geotechnical Investigations
Deep Foundation Design
Earth Retention Systems
Deep Foundation Testing

Water Management Design
Storm Water Collection Systems
Erosion and Sediment Control
Sustainable Site Features
Coastal Engineering

Industries

Renewable Energy,
Power & Utilities

Education

BS, Civil Engineering,
Michigan Technological
University, Michigan
MS, Lawrence
Technological
University, Michigan

Professional Engineer

MI, OR, CO, MD, IL



Project Manager

Mott MacDonald – Power Americas

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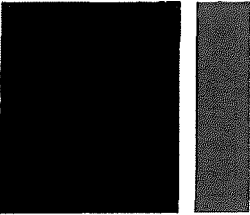
About

Mr. Hicks is a Senior Project Engineer in Mott MacDonald's Renewable Energy Group. Mr. Hicks has over 14 years of experience in the civil and geotechnical engineering fields, primarily for traditional power generation, power delivery, oil and gas, solar PV, and wind projects. Civil engineering experience includes design of storm water management systems, erosion and sediment control, sustainable site features, and coastal engineering. Geotechnical engineering design experience includes geotechnical investigations, shallow and deep foundations, earth retention systems, and ground improvement methods. Mr. Hicks has also provided field construction support for civil, structural and geotechnical aspects of projects.

Selected Engagements

- **Yabacoa Solar, Rabobank and Western Wind Energy, Puerto Rico:** Provided technical due diligence on civil and geotechnical aspects of the proposed 30MWac Yabacoa PV facility. Conducted site visit during the due diligence review period to meet with local design teams and AHJ. Challenges for this project included designing for up to 7 foot deep flood depths during the 100 year storm event.
- **San Fermin Solar, TSK Solar, Puerto Rico:** Provided technical due diligence review of all civil, structural, and geotechnical aspects of the proposed San Fermin Solar project, located in Loiza, Puerto Rico.
- **Power Delivery Projects, USA:** Performed civil and geotechnical design engineering for over 200 power delivery projects. Developed subsurface investigation and construction specifications for substation and transmission line projects. Assisted in coordination and troubleshooting during performance of subsurface investigations and construction. Developed design parameters for shallow and deep foundations. Performed deep foundation and earth retention design for substation and transmission line structures.

- **Illinois Portfolio, Cypress Creek Renewables, USA:** Lead Civil Engineer / Project Manager leading a team of designers and engineers for 40+ project sites in Illinois. Project sizes were 2MW to 20MW. Tasks included; review of local solar ordinance, compiling GIS data, developing preliminary site plans.
- **Colorado Portfolio, Cypress Creek Renewables, USA:** Lead Civil Engineer / Project Manager leading a team of designers and engineers to support permitting and design of a portfolio of 5 solar PV projects in Arapahoe and Elbert Counties, Colorado. Project sizes were all 3 x 10MW and 2 x 75MW. Tasks included; review of local solar ordinances and building regulations, compiling GIS data, development of civil design drawings and drainage report for Planning Board and Board of County Commissioner approval, development of site Grading, Erosion, and Sediment Control (GESC) report and drawings.
- **New York Portfolio, Cypress Creek Renewables, USA:** Lead Civil Engineer / Project Manager leading a team of designers and engineers to support permitting and design of a portfolio of 30+ solar PV projects across the state of New York. Project sizes were all 2MW. Tasks included; review of local solar ordinances and building regulations, compiling GIS data, development of preliminary site plans and drainage memos for zoning approval, incorporation of survey data, development of building permit drawing sets and SWPPPs which incorporate electrical and structural design performed by others, working with EPC to develop IFC civil drawings.



Select Biographies

Mott MacDonald: Josh Berkow, PE

Expertise

Electrical Design
Physical Design
Design Review
Cost Estimation
Power System Planning
Battery Storage System Selection

Industries

Renewable Energy,
Power & Utilities

Education

BS, Electrical
Engineering, State
University of New York
at Buffalo
MS, Electrical
Engineering, State
University of New York
at Buffalo

Professional Engineer

AL, CO, NY, IL, MI, VA,
OR



Senior Electrical Engineer

Mott MacDonald – Power Americas

Plymouth, MI

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About

Mr. Berkow is a Senior Project Engineer in Mott MacDonald's Renewable Energy Group. Mr. Berkow is an experienced power engineering professional specializing in solar energy, wind energy, energy storage, and substations in the US and internationally. He has worked for independent power producers, utility consultants, and research laboratories. He has experience in the planning, development, engineering, procurement, project management, cost estimation, and construction of wind plants, PV plants, battery storage systems, substations, and transmission lines.

Selected Engagements

- **GCL Solar, Multi-MW Solar Farm & Storage, Puerto Rico:** Project Engineer responsible for providing Owner's Engineer support to the client. The island location is driving challenging interconnection requirements including voltage regulation, frequency regulation, and ramp rate control which may require the installation of energy storage devices. Mr. Berkow was responsible for interpreting the requirements and finding solutions to meet stringent interconnection requirements. An RFP for multi-MW battery energy storage was written, issued, and evaluated as part of this project.
- **Flamma Corporation, HVDC Transmission Line RFP Support, Mexico:** Engineer responsible review of vendor submittals to ensure compliance with RFP requirements for a proposed 600km HVDC transmission line from Mexicali, Baja California, Mexico to Hermosillo, Sonora, Mexico. Mr. Berkow reviewed technical submittals related to the HVDC converter stations and the transmission line, to assist the owner in preparing a response to the RFP for the project. The system was a 1000MW bipolar HVDC system. Mr. Berkow also prepared an O&M specification and O&M work description for the proposed project.

- **McKenzie electric Coop, Southeast Area Substation:** Project Engineer responsible for engineering, procurement support, and construction support for three new 115kV to 25kV distribution stations, and one new 115kV ring bus substation
- **Guam Power Authority, Desktop Reliability & Storage Review, Guam:** Project Engineer responsible for review of systems studies on the GPA power grid. The project involved reviewing studies, providing a high level assessment of reliability upgrades, and a high level evaluation of energy storage options
- **Indeck Energy Storage Technology Assessment, USA:** Project Engineer responsible for a detailed assessment of available energy storage technologies and markets in 2015. Mr. Berkow conducted a survey of technology providers, power markets, and research documents to prepare an analysis of investment opportunities for independent power producers in the energy storage market. The document was to be used as a basis for determining when, where, and how an existing IPP could leverage existing assets to enter the market.
- **GridLiance, Lowell L&P Evaluation, MI:** Project Manager responsible evaluating a potential asset transfer of the transmission assets of Lowell Light and Power. Mr. Berkow reviewed the design of the LLP system, coordinated a field inspection of transmission assets, and assisted with the inspection report.
- **GridLiance, New Ulm Public Utilities Evaluation, MN:** Project Manager and Engineer responsible for evaluating the prospect of providing redundant transmission service, upgrade to 115kV, and a potential transmission asset transfer for New Ulm Public Utilities. Mr. Berkow reviewed available transmission maps, transmission planning studies, and aerial imagery to evaluate the system.

Select Biographies

Mott MacDonald: Keith Paul

Expertise

Consulting Engineer
Project Engineer
Thermal Heat Balance

Industries

Power Generation

Education

MBA, F.W. Olin
Graduate School of
Business at Babson
College
BS Mechanical
Engineering,
Northeastern University



Senior Mechanical Engineer

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About

Over 27 years of consulting, design, and development experience of power generation systems and subsystems on plants located around the world. Development of initial project heat balances, P&ID's, system descriptions, technical specifications, general arrangement drawings, and detailed designs in support of projects from the consulting stage through start-up, testing, commissioning, and operations. Consulting services includes review of project detailed design documentation, technical specifications, and performance criteria to ensure target performance and financial goals are achieved.

Selected Engagements

- **ExxonMobil:** Provide project development support including general arrangements, P&ID's, cost estimates, scopes of work, and bid documentation in support of permitting and project development for multiple combined cycle and cogeneration designs at confidential locations. Developed the technical portion of a gas-to-power workshop organized for the benefit of ExxonMobil development staff.
- **Project Octopus LNG & Central El Campesino:** Provided technical due diligence review support services for the marine terminal, the floating storage and regasification unit (FSRU), the gas pipeline, the 600 MW combined cycle power plant, and the electrical transmission interconnection line. Services included technical review of the designs, review of the EPC contracts, and social due diligence of the projects. Tasks included review of design basis for each of the projects, review of utility interfaces, project interface points, project schedules, facility performance, plant performance, operations and maintenance reviews, and environmental impact reviews.

- **Competitive Power Ventures:** Owner's Engineer developer for a new 7HA.02 technology based 1x1 single shaft combined cycle power plant, simple cycle F-class project, and confidential combined cycle projects. Development of general arrangement, site ambient noise optimization, environmental permit support, county relationship building, reclaim water and wastewater optimization, existing site integration, and plant performance optimization work have been provided for this project.
- **NTE Energy:** Owner's Engineer supporting site development of three combined cycle power plants United States. Technology selection and site arrangement optimization have been a major focus. Environmental, noise, permitting, and geotechnical optimization have been a focus for these projects. Site arrangements addressed noise, wetlands management, site accessibility, construction laydown spacing, potable water and wastewater connections, and site renderings for permits have been addressed on these projects. Advanced technologies included Siemens 8000H and Mitsubishi M501GAC and M501JAC1 gas turbine power cycle designs and arrangements.
- **InterGen:** Performance Engineer responsible for maintaining and improving the performance of all plants within the InterGen fleet. Responsibilities included performance monitoring of units utilizing Pi and EtaPro during normal operations, before and after outages. Project support provided for upgrades of existing units including development of technical specifications and project management of engineering consultants, and field support services including performance testing support. Provided support to the development team including technology evaluation support, heat balance development and performance projections, analysis of guarantee ambient conditions, and general arrangement evaluations. Blue Sky Technology Strategist supporting the evaluation of power generation technologies including but not limited to PV, solar thermal, onshore and offshore wind, and advanced combined cycles and rankine cycles for future development.

Appendix

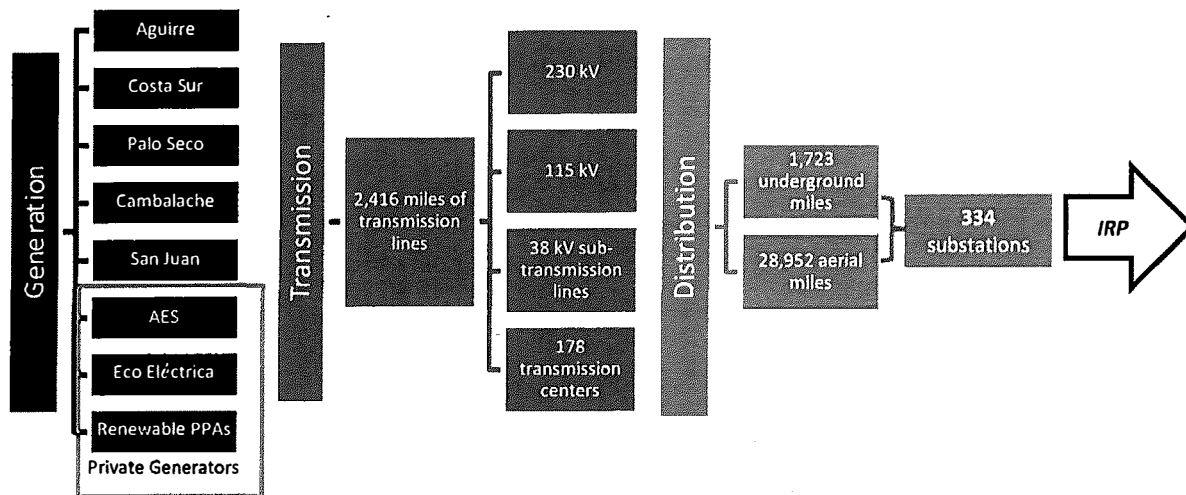
MS
DM

Appendix

The PREPA System Today and Transformed for Tomorrow

Key facts:

- PREPA gets ~1/2 of its revenues from the commercial sector and ~1/3 from the residential sector.
- Per capita consumption is 40% of the rest of the US.
- PREPA owns a fleet of aging and expensive generating stations (31 units, 20 facilities, 5,839MW).
- Fuel and purchased power is more than 70% of PREPA's cost. PREPA's main fuel source today is imported oil.



PREPA's Vision for the Future of Power²

1. **Customer-centric** via energy efficiency, customer side energy resources and demand response allowing customers to own their energy security and affordability.
2. **Financial Viability** via the drastic reduction of dependence on imported fuels.
3. **Reliable and Resilient:** Transitioning to the concept of MiniGrids as zones of resiliency that can improve restoration after a major weather event.
4. **Sustainability:** The future system will have renewables playing a predominate role thus reducing emissions.
5. **Economic Growth:** The distributed nature of the future system will allow for high levels of customer participation and an overall reduction in costs spurring employment and economic growth.

Notes

- (1) Law 57-2014 required the PR Energy Commission to establish the rules for PREPA's IRP. The planning period for the IRP is 20 years.
- (2) PREPA's draft IRP (Jan 20, 2019) subject to revision through the IRP process.
- (3) Source: P3 Summit Puerto Rico, Energy Projects.

Appendix PREPA's Generation Units

	Generation Units	Maximum Modeled Capacity (MW)	Fuel	Heat Rate at Max Capacity (BTU/kWh)	FOM (2018 \$/kW-year)	VOM (2018 \$/MWh)
MATS Affected Units	Aguirre 1 ST	450	No. 6 fuel oil	9,600	32.04	2.25
	Aguirre 2 ST	450	No. 6 fuel oil	9,700	32.04	2.25
	Costa Sur 3 ST	85	Natural Gas	9,747	35.95	2.72
	Costa Sur 4 ST	85	Natural Gas	9,747	35.95	2.72
	Costa Sur 5 ST	410	Natural Gas	9,747	35.96	2.72
	Costa Sur 6 ST	410	Natural Gas	9,747	35.96	2.72
	Palo Seco 1 ST	85	No. 6 fuel oil	9,725	46.47	4.95
	Palo Seco 2 ST	85	No. 6 fuel oil	9,725	46.47	4.95
	Palo Seco 3 ST	216	No. 6 fuel oil	9,725	46.47	4.95
	Palo Seco 4 ST	216	No. 6 fuel oil	9,725	46.47	4.95
	San Juan 7 ST	100	No. 6 fuel oil	10,497	49.02	2.93
	San Juan 8 ST	100	No. 6 fuel oil	10,445	49.02	2.93
	San Juan 9 ST	100	No. 6 fuel oil	10,445	49.02	2.93
	San Juan 10 ST	100	No. 6 fuel oil	10,445	49.02	2.93
Combined Cycle	Aguirre 1 CC	260	Diesel	11,140	22.64	6.79
	Aguirre 2 CC	260	Diesel	11,140	22.64	6.79
	San Juan 5 CC	200	Diesel	7,625	27.40	2.22
	San Juan 6 CC	200	Diesel	7,853	27.40	2.22
Gas Turbine	Cambalache 1 GT	83	Diesel	11,549	24.44	5.52
	Cambalache 2 GT	83	Diesel	11,549	24.44	5.52
	Cambalache 3 GT	83	Diesel	11,549	24.44	5.52
	Mayaguez 1 GT	50	Diesel	9,320	10.64	6.40
	Mayaguez 2 GT	50	Diesel	9,320	10.64	6.40
	Mayaguez 3 GT	50	Diesel	9,320	10.64	6.40
	Mayaguez 4 GT	50	Diesel	9,320	10.64	6.40
	Daguao 2 GTs	42	Diesel	14,400	26.54	20.19
	Palo Seco GT11 & GT12	42	Diesel	14,400	26.54	20.19
	Palo Seco GT21 & GT22	42	Diesel	14,400	26.54	20.19
	Palo Seco GT31 & GT32	42	Diesel	14,400	26.54	20.19
	Aguirre GT21 & GT22	42	Diesel	14,400	26.54	20.19
	Costa Sur GT11 & GT12	42	Diesel	14,400	26.54	20.19
	Jobos GT11 & GT12	42	Diesel	14,400	26.54	20.19
	Yabucoa GT11 & GT12	42	Diesel	14,400	26.54	20.19
	Vega Baja GT11 & GT12	42	Diesel	14,400	26.54	20.19
Hydro		34	Water	N/A	N/A	N/A
IPP Units	AES Coal 2 Units	454	Coal	9,791	79.46	7.23
	EcoElectrica Plant	507	Natural Gas	7,497	189.34	0.00
Total Existing Units Included in IRP		5,010				
Total Existing Units		5,634				

Not Included in IRP

In the draft IRP, 7 of PREPA's power plants have been identified as being past their useful life and the following recommendations have been filed.

IRP Supply Side Summary from the IRP:

- Maximize the rate of solar PV generation in 2019-2022
 - IRP recommends issuing RFP's for blocks of 250MW with a goal of installing 750-1,200MW
- Install between 500 and 1.1MW of Battery Storage in 2019-2022. IRP recommends that storage be added to the renewable RFP in blocks of 150-200MW
- Convert San Juan CC to Natural Gas using a ship-based LNG terminal facility. (in process)
- Develop a land-based LNG terminal in San Juan to supply a new CCGT of about 300MW and to supply San Juan 5 & 6. The new CCGT is needed by 2025
- Install a CCGT at Costa Sur and/or extend a new contract with EcoElectrica. If a new contract at a lower cost cannot be completed, the idea is to install a new 300 MW CCGT by 2025
- Install new Gas Turbines capable of burning containerized natural gas in order to support critical loads on the Micro-Grids beginning in 2021
- Develop a ship-based LNG terminal at Mayaguez and convert existing units to NG while building a new CCGT by 2028
- Develop a ship-base LNG terminal at Yabucoa – this is a back up plan in the event the other 2 terminals are not approved



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