GUAM POWER AUTHORITY
ATURIDÅT ILEKTRESEDÅT GUÅHAN
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June 20, 2023

VIA EMAIL TRANSMISSION

Fred Horecky, Esq.
Chief Administrative Law Judge
Guam Public Utilities Commission
414 West Soledad Avenue
Suite 207 GCIC Building
Hagatna, Guam 96910

Re: GPA's Response to PUC's Request for Information dated June 9, 2023 on GPA Petition Docket No. 23-17, regarding Liquified Natural Gas.

Hafa Adai Chief ALJ:

The Guam Power Authority (GPA) is in receipt of your Request for Information for the referenced petition and hereby submits its responses as follows;

1. Please produce copies of the following documents:

   A. All Contracts and Amendments between GPA and Stanley Consultants.

   Response:
   See folder "RFI1A" for the current contract between GPA and Stanley approved by PUC.

   B. The portion of the Stanley EPCM Contract which "excluded LNG tasks to allow more time for scope evaluation and for LNG tasks to be submitted for approval…"

   Response:
   See folder "RFI1B" in the USB provided for the contract with the specified exclusion.

C. The 2011 Preliminary Feasibility Study completed by R.W. Beck on the importation of LNG to Guam and use of natural gas on GPA's generation fleet.

Response:
See folder "RFI1C" in the CD provided for the R.W. Beck Study.

D. Documents, reports or other materials prepared by GPA, its employees, agents, or consultants which relate to a forum held in April 2014 concerning "LNG as an opportunity on Guam…".

Response:
See folder "RFI1D" in the CD provided for the 11 presentations made during this forum, a few touched on LNG options:

1. **TRANSFORMING GUAM'S ENERGY FUTURE (0800_SimonSanchez.PDF)**
2. **Regenerating Guam (0845_KFlores.PDF)**
3. **Guam's Next Generation Energy Mix (1000a_JohnB.PDF)**
4. **Guam Renewable Energy Association (1000b_Voacolo.PDF)**
5. **NAVFAC Marianas Renewable Energy (1000c_Masterson.PDF)**
6. **Integrated Resource Plan (IRP) Implementation Strategy Sessions (1000d_Grosdidier.PDF)**
7. **LEGISLATURE'S ROLE in GUAM'S ENERGY FUTURE (1245_Ada.PDF)**
8. **The market for LNG and the future of LNG supply in the Western Pacific (1300_Pehlivanova.PDF)**
9. **Natural Gas for Guam's Future (1330_Cotton.PDF)**
10. **GPA's Energy Strategy (1400_JohnCruz.PDF)**
11. **Financing Alternatives for the Guam Power Authority Liquefied Natural Gas Projects (1500_BarclaysCiti.PDF)**

E. The updated LNG Feasibility Study completed under the Program Management Office in 2012 (RW Armstrong/CHA) and filed in June 2014 in the Resource Implementation Plan.

Response:
See folder "RFI1E" in the CD provided for the Evaluation of Potential LNG Receiving, Storage, and Delivery Facilities Report.

F. All correspondence, letters, documents, reports, or other materials prepared by GPA and/or Stanley Consultants related to or concerning Phase I of the proposed project.

Response:

See folder "RFI1F" in the CD provided for communication between GPA and Stanley regarding Phase I.

G. All correspondence, letters, documents, reports, or other materials prepared by Stanley Consultants and or its sub-consultants, and/or GPA concerning or related to the estimated $1,809,000 consulting cost for the EPCM Phase I, or to how such cost was calculated, developed, or agreed upon.

Response:
See folder "RFI1G" in the CD provided for correspondence. Stanley added estimated internal labor and estimated costs to the K&M provided their estimate including estimates from COWI and CHIV. The estimated costs and schedule were reviewed with GPA and adjustments made as agreed upon.

H. All information, correspondence, reports or other materials indicating the full names, addresses, and qualification of each member of the "team of experts" assembled by Stanley Consultants, including "K&M", "COWI", and "CH-IV". Provide a description of each expert, including full name, home address, list of the individuals who will participate in this project, and background and experience of each for Stanley Consultants and the other sub consultants.

Response:
See Appendix A, K&M, COWI and CHIV Personnel Information. Note that the provision of employee's home address are not allowed by corporate policy. Business office addresses are provided in lieu. Charles Spooner with Stanley is located on Guam.

I. Copies of all correspondence between GPA and Stanley Consultants concerning LNG or the LNG Project.

Response:
See folder "RFI1F&I" in the CD provided for correspondence.

J. Any "cost estimates" prepared by COWI.

Response:
See Response to item 1G above.

2. Please describe in detail how GPA and Stanley Consultants developed, calculated, and agreed upon a cost of $1.809M for Phase I and estimated the cost for Phase I.

Response:
See Response to item 1G above.

3. Was the cost based upon hourly billing amounts? If so, specify all hourly billing amounts which were used to calculate the cost. Also, indicate the total number of work hours that are anticipated for the Phase I project. In general, provide all available information indicating how the price was achieved.

Response:
See folder "RFI3" in the CD provided for correspondence, Phase 1 Rates and Hours.

4. Please indicate the specific background of Stanley Consultants and its sub consultants regarding LNG and the issues set forth in GPA's petition.

Response:
Please see Appendix B for K&M's Team Background.

5. Why does GPA request a 20% contingency on the Stanley Consultants Phase I EPCM? Isn't GPA already authorized under the Contract Review Protocol to exceed a PUC approved contract amount by 20%?

Response:
The 20% was to obtain CCU approval for the total costs and is not in addition to the 20% authorized by the PUC under the Procurement Protocol.

6. Is the present time the appropriate time for PUC consideration of this LNG project, given that GPA has several present pressing issues and projects such as restoration of the power system after Mawar, meeting of the legislative goal of 100% renewable power by 2045 (with two solar projects that did not proceed ahead), and completion and operation of the Ukudu power plant?

Response:

See folder "RFI6" in the CD provided (presentation on LNG project timing) and below:

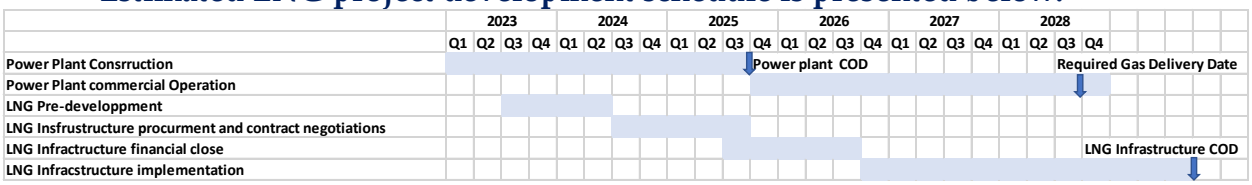
If natural gas is not available by the beginning of Year 4 of Commercial Operation, GPA's costs will be $50 million more per year for every year of delay because:

- **The Guaranteed Heat Rate will be approximately 1.1% higher with USLD than with natural gas. This difference will increase after the third year of delay**
- **The Fixed Capacity Charge rate will be approximately 6.5% higher with USLD than with natural gas**
- **The Fuel Charge will be based on USLD, which will be higher than natural gas.**

In addition, a delayed transition to gas will have other negatives effect, including:

- **Guaranteed plant availability will be lower (by approximately 0.3% for the first three years of delay, gradually increasing in later years)**
- **Dependable Capacity will have to be adjusted upward by approximately 2% to account for additional plant degradation.**
- **When operating on USLD, the power plant output will be limited for years with or steam turbine outages, as the power plant operating in simple cycle would reach its annual nitrogen oxide emission limits in less than a full year due to significantly higher nitrogen oxide emissions in simple cycle.**

Estimated LNG project development schedule is presented below:



As can be seen from this schedule:

- **Even if the LNG development activities start in the third quarter of 2023, natural gas, under the best-case scenario, will not be available for the Ukudu project until the beginning of 5th year of commercial operation, which is later that the beginning of the 4th year required to eliminate any cost penalties under the ECA**
- **The above schedule assumes 15 months for permitting and financial close. Given the regulatory approval requirements, this is optimistic.**

Therefore, the LNG project development has to start as soon as possible.

7. With the potential one-year delay of the Ukudu power plant, couldn't this issue be addressed by the PUC later? If not, why not? To address this issue, should

PUC not await the successful functioning of Ukudu on ultra-low sulfur diesel fuel? What is the harm, if any, in waiting until the other issues are addressed?

Response:
Please see Appendix B and responses to Question No. 6 above.

8. Given that there are four proposed Phases to the LNG Project scope, and Phase II involves " Infrastructure Procurement" is it a fair conclusion that GPA has already decided that it will proceed ahead with the full LNG Infrastructure Implementation? Upon what facts or reasoning does GPA conclude that the LNG Infrastructure should be fully implemented?

Response:
Stanley has proposed four phases in the development and execution of LNG project. GPA is requesting for approval of Phase I which will update prior studies and support further decisions to move forward with the additional LNG phases.

9. Phase I only appears to involve details to carry out implementation of the LNG project, including site selection, receiving terminal, LNG storage and regasification facility etc. Why is there no cost benefit analysis to determine whether the alleged benefits of LNG are supported by the cost, or analysis of the option not to implement LNG? Shouldn't the option not to implement LNG also be considered by Stanley in Phase I? If not, why not?

Response:
Phase 1 includes LNG terminal option technical and economic analysis. The scope of this analysis is to:

1. **Identify all technically viable options for importing gas for the Ukudu power plant. Screening and prioritizing these options**
2. **Estimating the CAPEX, OPEX, and other costs associated with the development and implementation of each option**
3. **Estimating the economic benefits of each option, including cost savings, reduced emissions, and others**
4. **Calculating the cost-benefit ratio (CBR) or economic internal rate of return (EIRR) of each, and selecting the option with the highest ratio or returns (preferred option)**
5. **The rest of the study will focus on the preferred option.**

Based on K&M's experience, a gas supply project that uses imported LNG to displace USLD has always resulted in a positive EIRR or a CBR above 1—as is the case in Guam.

10. What is the estimated cost for implementation of the LNG project and infrastructure project? If GPA cannot presently estimate the cost, and how it will be paid, is it possible for the PUC to evaluate or approve the project at the present time?

Response:
Since the project will be implemented on a BOT basis, a private company (gas supplier) will pay the CAPEX and OPEX of the LNG project. The gas supplier will be selected through a competitive tender. The gas supplier and GPA will sign a 20 to 25 -year gas supply contract. The price gas price that GPA will pay under this gas supply contract will be the basis for the gas supplier to recover the cost of the LNG project. PUC will have the opportunity to approve the gas supply contract, including the gas price, and independently determine that it is below the USLD price. Based on K&M's experience, the price of gas using imported LNG (including the cost of LNG infrastructure) is generally below the USLD price. As explained in response to question 10, GPA will confirm that this is the case as part of the cost-benefit analysis.

11. Previously, in 2013-14, GPA Docket 14-02, GPA had requested that PUC authorize its Program Management Office, through R.W. Armstrong, to proceed with implementation of the LNG Infrastructure. PUC Consultant Lummus (Report dated December 25, 2013) indicated that, in the GPA 2012 Integrated Resource Plan, GPA stated that GPA could invest in the order of $650M to transition most of its generation units to LNG and achieve a present value saving over 30 Years of approximately $900M (PUC never accepted GPA's pricing assumptions for LNG/RFO or that GPA could obtain JCC pricing. PUC Legal Counsel estimated that GPA would be expending nearly $900M at that time to save $900M)). What would be the total cost of the LNG infrastructure implementation at the present time, and what would be savings be? Given the passage of time, would it be appropriate to conclude that the present cost of the LNG Infrastructure implementation would be more than $1billion?

Response:
As part of Phase 1 work, the NPV of the total LNG cost during the term of the ECA, including all the cost components such as cost of LNG at the source, transportation, LNG infrastructure in Guam, regasification, etc., will be compared with the NPV of the ULSD cost plus additional operation costs associated with increase maintenance frequency and heat rate degradation when operating on USLD. The projected NPV of savings associated with implementing the LNG project will also be calculated. Based on K&M's recent experience, switching from diesel fuel to LNG is expected to be economically justified.

As another point of reference, based on the recent K&M experience for a Caribbean Island with the total gas demand of approximately 5 million MMBtu/year, the total CAPEX for the LNG terminal was approximately $100 million. With the total gas demand in Guam roughly estimated at13.5 million MMBtu/year, it is highly unlikely that terminal cost for Guam would reach anywhere near $900 million. As mentioned above, this analysis will be conducted as part of Phase 1.

12. Would the LNG Infrastructure implementation be the costliest project in GPA's history? Would it be the costliest project in the history of the Government of Guam?

Response:
The CAPEX associated with the LNG project implementation will be covered by a private investor, and not by GPA. During the term of the ECA, GPA will be paying for the gas delivered to the power plant. The total cost of gas to be paid by GPA will be comparable to (and will likely be lower than) the total cost of ULSD to be paid by GPA under the current arrangement.

The capital cost of the Ukudu plant is approximately $550 million. Based on the estimate conducted as part of the Ukudu plant proposal evaluation, the annual cost of ULSD is estimated at $177 million per year. Over 25 years this would translate to approximately 4.4 billion. The cost of the LNG infrastructure is definitely going to be less than the sum of the CAPEX and the cost of ULSD for the Ukudu project and will, probably, be less than the Ukudu project CAPEX. Therefore, the LNG infrastructure implementation is not expected to be the costliest project in the GPA history.

13 Can GPA presently provide a cost-benefit analysis of the LNG project? If not, will GPA agree to require its Consultant to do so in Phase I of an LNG study? Can PUC obtain sufficient information and analysis from GPA to demonstrate that the costs, environmental hazards, and implementation difficulties do not outweigh the possible benefits of the project?

Response:
Yes, the cost – benefit analysis will be performed as part of Phase 1 of the LNG study.

14. There are several concerns about the proposed Phase IV of this project. GPA envisions that the party it contracts to provide LNG infrastructure would "agree for GPA to take an "equity stake" in the projects after the initial commissioning of the new facilities." GPA indicates that it would be "the sole off-taker for all services and fuel supply provided by and at these facilities", which would seem to create a monopoly. The LNG infrastructure "cannot be pledged for any non-

GPA direct business steams." Uses of the LNG facilities by the infrastructure contractor for bunkering, regional LNG or CNG supply, and local Guam would be subject "for a negotiated franchise fee." In addition, GPA would become an active LNG seller in the market: an option of "GPA selling LNG or gas ex-terminal to third parties who could then distribute to end users; GPA allowing third parties to use the LNG terminal to import LNG and charging these third parties a fee for using the terminal (equivalent to a franchise fee)." GPA would become a participant in the local fuel market and would potentially attempt to convince other fuel suppliers to switch to LNG.

Response:
The Guam Public Utilities Commission and its legal counsel should work together with the GPA legal counsel to address these questions outside the RFI process.

RFI contention 1:
GPA envisions that the party it contracts to provide LNG infrastructure would "agree for GPA to take an "equity stake" in the projects after the initial commissioning of the new facilities.".

Response:
The proposed contract is a build- Operate-Transfer contract. Thus, GPA will own the LNG facility after the Contract expires. GPA already has an equity stake in the contract. It does not need to take an additional stake.

RFI contention 2:
GPA indicates that it would be "the sole off-taker for all services and fuel supply provided by and at these facilities", which would seem to create a monopoly.

Response:
The LNG Contract is a BOT contract. It is a contract with GPA. Thus, GPA should be the "the sole off-taker for all services and fuel supply provided by and at these facilities."
The size of the regional market for LNG, CNG, or NG versus the cost of entry favor the GPA contracted facility will likely determine the type of market. GPA envisions that the LNG facility would provide tolling services for LNG. GPA's contracts for LNG supply need not be the source of LNG for tolling customers.

RFI contention 3:
For gas The LNG infrastructure "cannot be pledged for any non-GPA direct business streams."

Response:
The LNG infrastructure is expected to be financed based on the revenue stream from GPA payments under the BOT arrangements and will be pledged as a collateral to project lenders. Any revenue streams from the project based on non-GPA direct business streams may or may not materialize. Since the LNG infrastructure will be fully pledged to the GPA BOT project lenders based on the GPA direct business stream, the lenders will not allow any portion of the infrastructure to be pledged to any third party associated with non-GPA direct business stream.

RFI contention 4:
Uses of the LNG facilities by the infrastructure contractor for bunkering, regional LNG or CNG supply, and local Guam would be subject "for a negotiated franchise fee."

Response:
Yes. This is GPA's position. GPA customers are paying towards ownership of the LNG facility. Therefore, they should benefit from any uses of the facility. The franchise fees can be assigned to various potential uses for benefitting customers including but not limited to:

- **Direct offset to fuel costs via the LEAC;**
- **Capital costs for renewable integration projects;**
- **Energy efficiency projects;**
- **Others.**

RFI contention 5:
In addition, GPA would become an active LNG seller in the market: an option of "GPA selling LNG or gas ex-terminal to third parties who could then distribute to end users; GPA allowing third parties to use the LNG terminal to import LNG and charging these third parties a fee for using the terminal (equivalent to a franchise fee)." GPA would become a participant in the local fuel market and would potentially attempt to convince other fuel suppliers to switch to LNG.

Response:
GPA will not become an active LNG seller in the market. That would be the responsibility of the franchise holder: the LNG Facility IPP.
Other entities on Guam have already expressed interest in obtaining natural gas should GPA contract the infrastructure. Other fuel suppliers may become bidders for GPA or other potential customer LNG supply.
GPA is already a participant in the local fuel market as the largest customer for ULSD and other fuels. GPA has agreements with local fuel providers for "borrowing" ULSD to bolster island energy security. GPA has acted as an economic catalyst for Guam using its position as a large fuel customer.

Occasionally, GPA has played a role as an economic catalyst for Guam.

- **Prior to switching from residual fuel, GPA provided bunkering services to Matson. This service enabled Matson to bring larger ships into Guam. The quantities used for bunkering were too small to obtain a reasonably priced supply without the intervention and participation of GPA.**
- **In 2009, in cooperation with U.S. EPA Region IX, the Guam Legislature (Senator Telo Taitague sponsored Bill 44), Guam EPA, and Guam Transportation Companies, GPA researched the potential for GPA to switch to ULSD from 0.5% Diesel. The Guam Transportation industry was finding it hard to obtain new heavy vehicles that could use regular diesel. This resulted in older vehicles continuing service beyond their reliable life. Many of these vehicles would get stalled on Guam roads disrupting traffic and eroding these companies' bottom lines. Additionally, U.S. EPA had commented on the military build out increased emissions from heavy equipment. They were supportive of a Guam ULSD transition.**

Without GPA engendering this transition, Guam supply for ULSD would not be reasonably priced. The Defense Logistics Agency (DLA) was bringing in ULSD for DoD uses in drum containers at over $10/gallon, several times the civilian non-GPA price for regular diesel. GPA found that the difference in price between ULSD and regular diesel in the Pacific Region was negligible as more countries were adopting the ULSD standard. GPA encouraged the transition and supported the legislation. Governor Camacho signed Bill 44 into law in August 2010. It became effective January 1, 2011.

(a) Are any of the intended powers of GPA listed above consistent with GPA's governing statute, which only empowers GPA to control, operate, improve, equip, maintain, repair, renew, replace, reconstruct, alter and insure the electric system …" (12 GCA sec. 8104 (k)?

Response:

GPA's powers under 12 GCA 8104 (b) permit GPA to hold and use any real or personal property (by grant, purchase, gift, devise, or lease) *necessary or convenient or useful* for the carrying on of any of its powers pursuant to Title 12, Chapter 8. For instance, GPA may lease its property. GPA leases office space to GWA. And, aside from 8104(k), 8104 (a) further empowers GPA to generate, transmit, distribute, sell and exchange electric power on Guam. Therefore, the intention of this study and the agreements proposed are determined *necessary or convenient or useful* for GPA to carry on its powers as permitted by statute. GPA will not own the LNG facility until the Contract terminates and the property transfers to GPA. GPA will be negotiating with the LNG Infrastructure IPP to allow them contractual rights of use of the LNG facility for other than GPA LNG supply in exchange for a fee to GPA.

(b) What statutory authority allows GPA to participate in transshipment of LNG to other jurisdictions?

Response:
GPA will not be involved in active transshipment of LNG outside of Guam while the LNG IPP contract is in force. At that time, PUC and GPA may bring this matter for discussion.

(c) What is the legal authority for GPA to become a participant and seller in the local fuel market to third parties, to own an equity stake in the fuel market, or to seek to derive a profit from third parties on the sale of LNG?

Response:
GPA is already a participant in the local fuel market as the largest customer for ULSD and other fuels. GPA has agreements with local fuel providers for "borrowing" ULSD to bolster island energy security. GPA has acted as an economic catalyst for Guam using its position as a large fuel customer.
Occasionally, GPA has played a role as an economic catalyst for Guam.

- **Prior to switching from residual fuel, GPA provided bunkering services to Matson. This service enabled Matson to bring larger ships into Guam. The quantities used for bunkering were too small to obtain a reasonably priced supply without the intervention and participation of GPA. GPA has sold RFO to Matson at a 15% premium.**
- **In 2009, in cooperation with U.S. EPA Region IX, the Guam Legislature (Senator Telo Taitague sponsored Bill 44), Guam EPA, and Guam Transportation Companies, GPA researched the potential for GPA to switch to ULSD from 0.5% Diesel. The Guam Transportation industry was finding it hard to obtain new heavy vehicles that could use regular diesel. This resulted in older vehicles continuing service beyond their reliable life. Many of these vehicles would get stalled on Guam roads disrupting traffic and eroding these companies' bottom lines. Additionally, U.S. EPA had commented on the military build out increased emissions from heavy equipment. They were supportive of a Guam ULSD transition.**

Without GPA engendering this transition, Guam supply for ULSD would not be reasonably priced. The Defense Logistics Agency (DLA) was bringing in ULSD for DoD uses in drum containers at over $10/gallon, several times the civilian non-GPA price for regular diesel. GPA found that the difference in price between ULSD and regular diesel in the Pacific Region was negligible as more countries were adopting the ULSD standard. GPA encouraged the transition and supported the legislation. Governor Camacho signed Bill 44 into law in August 2010. It became effective January 1, 2011.
GPA will not have an equity stake in the fuel market while the LNG IPP contract is in force. At that time, PUC and GPA may bring this matter for

discussion. Generally GPA's powers under 12 GCA 8104 (e) and (l) permitting the entry of all necessary and convenient contracts and actions of "all other things necessary" to the "full and convenient" exercise of its powers permits the above.

(d) Has GPA obtained any legal opinion indicating that it is legally authorized to engage in the functions and purposes of Phase IV of the LNG project?
(e) If it has obtained a legal opinion, please provide the same to the PUC. If it has not obtained a legal opinion, will it do so?

Response:
Aside from our responses herein, no legal opinions by any in-house or contracted counsel have been performed. GPA will seek the legal opinions from counsel.

15. GPA indicates that the total estimated cost for four Phases of the Stanley Consultants EPCM/LNG study would be $4,184,000. Given the prior cost overruns, and need for contract amendments for both R.A. Armstrong and Stanley Consultant contracts, is there any assurance from GPA that the Stanley Contract for LNG study/tasks will not exceed the estimated amount? Is it likely that there will be additional costs to the Stanley EPCM contract for LNG or that the Stanley Contract will have to be further amended for increased cost?

Response:
Phases 1, 2, and 4 are likely to be performed without any cost overruns. Phase 3 (engineering support during construction) will depend, to a great extent, on performance of the private investors selected for executing the LNG infrastructure project.

If you have any questions, please feel free to contact GPA's Assistant General Manager of Operations, Jennifer G. Sablan at jsablan@gpagwa.com (671) 648-3103 or myself at tgrojas@guamwaterworks.org or via phone at (671) 300-6848.

Sincerely,

Theresa G. Rojas
Legal Counsel

: Enclosures / Appendices Attached

Appendix A: K&M, COWI and CHIV Personnel Information

A.1 K&M

K&M Advisors offices are located at 7200 Wisconsin Ave., Suite 750, Bethesda, MD USA 20814.

LNG Project Manager - Lenny Golbin

Mr. Golbin, a Managing Director at K&M, has over 35 years of power plant development, due diligence, engineering, procurement, and construction experience. He has led the technical due diligence of 28 power plants with an aggregate capacity of 13,360 MW. In addition to an extensive due diligence track record, Mr. Golbin has strong expertise in supervising power plant EPC procurement, design, and construction. He has led or been involved in Owner's Engineer teams for eight power plants with a total capacity of 1,700 MW. His experience also includes leading or being a key member of transaction advisory teams. He has been deeply involved in the preparation, procurement, and negotiation of 7 Independent Power Producers (IPP) transactions in emerging markets that reached financial close. Mr. Golbin offers a unique combination of commercial, financial, and technical skills, which provides him with an exceptional understanding of complex interrelations between commercial, legal, financial, and technical aspects of a project, their impact on the project risks, and proper risk allocation.

Mr. Golbin led K&M's full range of technical advisory services to support each transaction, including technology evaluation, conceptual design review, capital and operating cost estimates, evaluation of fuel and water supplies, assessment of grid interconnection, technical review of all project agreements, and inputs to the RFP and bid evaluation process.

Mr. Golbin currently leads K&M's technical aspects of work for the LNG-to-Power Feasibility Study in Kenya, where the Government intends to create a domestic natural gas market for power generation and industrial use with the aim to help diversify the country's energy mix, improve energy security, reduce the cost of electricity and reduce greenhouse gas emissions. Mr. Golbin played the major role in assessment of feasibility of conversion to natural gas of the existing power plants operating on HFO and construction of the new gas- fired power plant, estimating the LNG demand, evaluating LNG terminal options, site selection, conceptual design, developing capital and K&M cost estimates, and evaluating overall technical and economic feasibility of the LNG-to- power project,

Mr. Golbin has been responsible for technical aspects of the feasibility studies for power plant conversion to natural gas and development of LNG supply infrastructure in several countries, including island nations of Aruba, Turks and Caicos, and Curacao. He is currently involved in an assignment for procurement of the supply infrastructure for several locations in West Africa, where prospective suppliers are expected to deliver LNG at an onshore or floating terminal and send gas via pipeline to power generating facilities. Mr. Golbin is involved in negotiations and the contract implementation with the prospective gas supplier.

Mr. Golbin is also an expert in performing technical due diligence for the acquisition or sale of existing power generation plants. Mr. Golbin has performed full technical due diligence for private investors of 28 power plants with an aggregate capacity of 13,360 MW. Mr. Golbin's range of due diligence expertise covers physical asset evaluation, site inspection, operations and maintenance evaluation, staff performance assessment, fuel supply analysis, CAPEX estimates, O&M cost estimates, and review of all project agreements, including PPA, FSA, Implementation Agreement, and O&M Services Agreement.

Mr. Golbin holds a M.S. in Thermal Power Plant Design, Operation, and Maintenance from the Polytechnical University of Belarus and is a Registered Professional Engineer in Maryland.

LNG Task Lead – Alfonso Guzman

Mr. Guzman, K&M's President, has over 25 years of experience in power and water PPP projects. Mr. Guzman's power experience includes advising government and private clients on the development of new privately financed power generation projects, or on concession LNG or acquiring existing assets. His experience also includes working with regulatory agencies to review rate applications or develop rate setting methodologies.

Mr. Guzman has advised governments and developers on 14 power generation transactions totaling 6,000 MW and an investment of nearly $5.5 billion. This work includes governments on the preparation, procurement and negotiation of public private partnership (PPP) or independent power producer (IPP) transactions.

His experience includes working with electricity regulatory agencies. This includes advising developers or utilities to file and defend rate applications or advising regulators to develop new rate setting methodologies or reviewing rate applications.

Mr. Guzman led K&M efforts in assisting private clients and public utilities in conducting feasibility studies, organizing competitive bidding, bid evaluation, drafting LNG supply and LNG infrastructure development contacts, and contract negotiations with winning suppliers and LNG infrastructure developers for LNG to power projects in Aruba, Curacao, Turks and Caicos, Kenya, and Yemen.

In addition, Mr. Guzman has been responsible for the development of an LNG Import Terminal analysis for a client in West Africa. He has developed a gas demand forecast and negotiation support. As part of the negotiation support, Mr. Guzman developed the negotiation roadmap, approach and rules, and performed knowledge sharing and capacity building activities.

Mr. Guzman holds a M.S. and B.S. in Civil Engineering and a M.S. in Management from the London Business School.

LNG Commercial Expert – Don Mackay

Mr. Mackay is an LNG commercial expert specializing in the business development and financial and economic analysis of LNG import projects, LNG terminals, LNG procurement, and LNG to power projects. Together with K&M Advisors, he's currently advising a Caribbean power utility on switching power generating plant from fuel oil to natural gas, LNG procurement, LNG import terminal options, and associated infrastructure development. Based in Singapore from 2011 to 2016, Mr. Mackay led commercial and business development for BW Group's floating LNG infrastructure business, including FSRUs, FSUs and LNG supply/sourcing. He joined BW Group from Gazprom in Singapore where he led and managed their Asia Pacific LNG marketing activities. Prior to Gazprom, Mr. Mackay had a 25-year career with Shell in a variety of engineering, commercial, and business development roles. In Singapore from 2007 to 2010, he led the commercial development of Shell's LNG business in South East Asia. In The Hague from 2004 to 2007, he managed Shell's LNG customers, traded LNG, negotiated mid-term and long-term LNG supply deals and developed LNG import projects. In London from 1999 to 2004, he managed the business development of Shell's gas-fired power generation opportunities in Latin America and Africa. Mr. Mackay started his career in 1985 as an instrumentation engineer with the NZ Refining Company (a then Shell JV).

Senior Technical Expert – Nicholas LaBriola

Mr. Nicholas LaBriola is a Manager on the Technical Services team with extensive experience in engineering and commissioning in the Power, Nuclear, and Oil, Gas, & Chemical industries. Mr. LaBriola, a Mechanical Engineer, has 11 years of experience in power plant system design engineering, equipment sizing, and technical specification development. Mr. LaBriola has experience in the development of power plant technology configurations as part of feasibility studies and has provided technical oversight for power plant design and operation as an owner's engineer representative.

Mr. LaBriola coordinated with equipment suppliers to develop the technical specification for natural gas supply from an LNG terminal to a power plant in Curacao. Mr. LaBriola was also responsible for assessing the technical feasibility of power plant conversions to LNG and the technical feasibility of a new plant site. He also oversaw the conceptual design and cost estimates, implementation schedule, and risk assessment for the plants to be converted and the new power plant.

Prior to K&M Advisors, Mr. LaBriola was a Mechanical Design and Commissioning Engineer at Bechtel, focusing on power plant system design, equipment sizing, and technical specification development for Nuclear, Natural Gas, and Petrochemical plants. He worked to develop technical procedures for system and equipment testing and commissioning as an on-site system commissioning engineer.

He possesses a Bachelor of Science in Mechanical Engineering from the University of Maryland-College Park and is a licensed Professional Engineer (P.E.) in the state of Maryland.

Senior Financial Analyst – Kathleen Cohen

Ms. Cohen focuses on the economic and financial assessment of energy projects under K&M's Strategic Practice. At K&M, Ms. Cohen has carried out financial modelling and economic analysis of renewable energy projects in the Caribbean. Recently, on assignment in the Cayman Islands, Ms. Cohen and the K&M team provided strategic advice to the Caribbean Utilities Company (CUC) to review and finalize a work-in-progress version of the LNG-to-Power strategy for the Cayman Islands, and to develop a Request for Proposals for importing, storing, and processing LNG for power generation. As part of a project in Curacao, Ms. Cohen is preparing a generation model and LCOE financial model for an LNG supply agreement. Ms. Cohen has also been responsible for modeling LNG logistics and LCOG/LCOE and the Project's financial model for multiple LNG projects. She has also been responsible for assisting with the LNG demand analysis and identifying and aggregating potential sources of demand. She is also contributing to the development of a business case for LNG.

Prior to joining the K&M team, Ms. Cohen was a consultant to the World Bank where she worked on projects related to electric mobility and environmental and social accountability. She has a strong background in researching and writing reports on topics such as energy economics, electricity systems, environment, and sustainable mobility.

Ms. Cohen has a Master's degree from the School of Advanced International Studies at Johns Hopkins University with a concentration in Energy, Resource and Environment and an undergraduate degree in International Relations from Tufts University.

A.2 COWI

Project Director / Technical Advisor – Ron Heffron

2355 Main Street, Suite 210, Irvine, CA 92614

Veteran of the marine energy and electric utility sectors with over 40 years of experience in the planning, design, development and optimization of marine, energy, and transportation facilities. Extensive experience on marine projects involving LNG and Floating LNG terminals, liquid bulk terminals, cargo terminals, Navy waterfront facilities, and offshore wind farms. Currently serving as Senior Market Director for COWI's Energy & Marine business, focusing on marine terminals, Navy waterfront facilities, offshore wind farm and green fuels projects. He is the chairman of a PIANC working group that in 2022 published guidelines for the planning and design of LNG and similar terminals, entitled "Recommendations for the Design and Assessment of Marine Oil, Gas & Petrochemical Terminals".

Mr. Heffron is a global leader and innovator in the niche field of floating LNG import and export terminal marine infrastructure design. He led a team to pioneer the definition of 60+ unique configurations and 20+ alternative mooring solutions for permanently moored LNG vessels, to lower CAPEX, lower OPEX and improve berth uptime. Alternatives include enhanced conventional moorings, guide pile moorings, spread moorings, single point moorings, grounded moorings, tension pile moorings, and others. Projects have included the design of mooring systems for aggressive long period wave conditions as well as for surviving Category 4/5 cyclones and tsunamis up to five meters. This pioneering work has led to involvement in 50+ nearshore FLNG/FSRU terminal projects on six continents.

He has experience in Guam and is intimately familiar with site conditions and logistics challenges throughout the island. He has worked on over 12 Navy waterfront projects on Guam and has also worked on projects within the Port Authority of Guam and transportation projects throughout the island. In addition, he has project pursuit and execution experience in over 40 countries, including North America, Asia, Oceana, Europe, Middle East, Africa, Central America, South America, and Caribbean. Mr. Heffron has served as Technical Lead or Project Manager on the following projects:

- Initial Assessment of Small-Scale LNG-To-Power Floating LNG Import Terminal, Cebu, Philippines
- Concept Selection Study for LNG Import Terminal, Confidential Client, Philippines
- Pre-Feed and Feed for Liquid Fuel Import Terminal, Confidential Client, Philippines
- Feasibility and Pre-Feed Study for Floating LNG Import Terminal, Batangas Bay, Philippines
- Rehabilitation and Upgrade Design for the Mobil Cabras Golf Pier, ExxonMobil, Guam
- X-Ray Wharf Upgrade Design, Naval Base Guam
- Design of $86.0M Extension to Navy Kilo Ammunition Wharf, Guam
- Design of Tango and Uniform Wharf Improvements, Guam
- Design of Sumay Cove Waterfront Improvements, Guam
- Initial Assessment of New Small-Scale Floating LNG Import Terminal, Confidential Client and Location, Caribbean
- Initial Assessment of New Floating Power Plant and LNG Import Terminal, Confidential Client and Location, SE Asia

- Initial Assessment of Four Small-Scale Floating Power Plants and LNG Import Terminals, Confidential Client and Location, SE Asia

Project Manager – Mark Weisz

555 12th Street, #1700, Oakland, CA 94607

Mr. Weisz has over 30 years of experience with construction cost estimation and constructability review for marine construction projects specializing in pile driving (concrete, steel, composite, and timber) and concrete and timber dock installation. His project background includes construction and demolition of wharfs, docks, dolphins, walkways, gangways, and emergency repairs. He has served as Estimator and Project Engineer on the following projects:

- Shell Refinery Terminal, Berth 1 and 2 Seismic Mitigation, Martinez, CA
- Mission Bay Interim Ferry Landing at Pier 48.5, San Francisco, CA
- AMPORTS Antioch Pulp to RO/RO Berth Conversion, Antioch, CA

Project Engineer – Marc Percher

555 12th Street, #1700, Oakland, CA 94607

Mr. Percher is a civil engineer with more than 20 years of experience in structural engineering design and analysis of marine structures, oil, and gas facilities for earthquakes, and building structures for blast loads. He has acted as lead analyst or reviewer of seismic analyses, mooring and berthing analysis, and acted as the Audit Team Lead for numerous marine oil terminals as part of audits for California's Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS) requirements. As part of this work, he performed and evaluated response spectrum and nonlinear pushover analyses using displacement-based performance criteria and incorporating soil–structure interaction and nonlinear material performance. He has also acted as the senior designer for multiple ferry terminals as well as other civil or military marine structures.

Mr. Percher has served as Senior Marine Engineer on the following projects:

- Cedar LNG Spread Mooring Access, Canada
- International-Matex Tank Terminals (IMTT) Bayonne Marine Oil Terminal Coal Pier Bulkhead Wall Assessment
- US Navy Base Point Loma Fuel Pier Marine Loading Arm Mitigations
- Green Diamond Eureka Terminal Breasting Dolphin Replacement
- First GEN Pre-FEED FSRU LNG Import Terminal, Philippines
- Antillean LNG Design-Build for Weeks Marine
- Floating LNG Terminal, Confidential Client and Location
- Pacific Northwest Pre-FEED and FEED Design of New LNG Terminal and Offloading Facility, Canada
- Caribbean Floating LNG Terminal, Tolu, Columbia
- Krishina Godavari Floating LNG Terminal, Kakinada, India
- Cartagena Bay Floating LNG Terminal, Columbia
- Trans Mountain Westridge Marine Oil Terminal, Canada

- Evaluation of Existing Marginal Wharf Terminal for Public Access, Oakland, CA
- US Navy, Pier D Allision Repairs, Guam

Senior Coastal Engineer – Jena Gilman

720 3rd Avenue, #2101, Seattle, WA 98104

Ms. Gilman is a civil engineer with over 30 years of experience designing and managing major coastal and river engineering projects. She has technical expertise in coastal hydraulic analysis, the design and construction of coastal and river structures and the design and implementation of dredging programs. Her projects have included breakwaters, jetties, groins, navigation channels, small boat basins, and river training structures. She has been responsible for the coastal engineering on several very large multi-disciplinary projects in the United States, Canada, Central America, and the Middle East. Ms. Gilman has also been responsible for research that has advanced the state-of-the-art for the design and construction of rubble mound berm breakwaters, rigid thin vertical breakwaters and hurricane surge barriers. Ms. Gilman has served as a Coastal Engineer on the following projects:

- LNG Terminal Dredging Plan, Prince Rupert, BC
- Petroleum and Cement Terminal Design Services, Port of Alaska, Anchorage, AK
- Duwamish River Terminal 117 Emergency Shore Protection, Port of Seattle, Seattle, WA
- New Port in Gulf of Aqaba including Bulk and Container Terminals, Aqaba, Jordan
- Base Oil Project Marine Terminal Expansion, Chevon, Pascagoula, MS
- Conceptual Study for Open Cell Dock at Vancouver Wharves Bulk Terminal, North Vancouver, BC
- Black Ball Ferry Terminal Belleville Wharf Replacement, Victoria, BC

Coastal Engineer (L5) – Nancy Zhou

88 Pine Street/Wall Street Plaza, 4th Floor, New York, NY 10005

Dr. Zhou has extensive experience in metocean design criteria, numerical simulation of coastal and hydraulic processes, extreme value analysis, fluid-structure interaction analysis, design of coastal structures, flood mapping, risk analyses, and climate change assessment. She is knowledgeable in mooring analyses and design of offshore marine structures. Dr. Zhou has served as a Coastal Engineer on the following projects:

- Port of New Orleans Sinclair Site Container Terminal, New Orleans, LA
- Port of Miami North Bulkhead Berths 1-6 Realignment Project
- North / West / South Battery Park City Resiliency Projects
- Springmaid Pier Rebuild Project, Myrtle Beach, SC
- Port of Corpus Christi Authority Channel Deepening Project, Aransas, TX
- Great Lakes Dredge & Dock Corporation Bahrain Artificial Island Protection

Structural Engineer (L5) – Masaaki Ward

555 12th Street, #1700, Oakland, CA 94607

Mr. Ward has seven years of experience in the civil/structural engineering field. Work experience has primarily been in the planning, cost-estimating, design, inspection, and construction

engineering of new and existing marine structures including foundations for offshore wind turbines, ferry terminals, urban and industrial waterfronts structures such as bulkhead walls and wharfs, and oil & gas terminals. He provided structural engineering or bid review for the following projects.

- Motems Audit for the Plains Richmond Terminal
- Buckeye Yabucoa Marine Terminal
- Continental Maritime Pier 7 Marginal Wharf
- Port of San Francisco Seawall
- Georgia-Pacific Long Beach Bulkhead
- Andeavor Avon Fender Replacement Study
- WETA Richmond Ferry Terminal
- Alameda Seaplane Lagoon Ferry Terminal
- Mission Bay Ferry Terminal
- Nassco Pier 12 and Bulkhead Analysis
- Phillips 66 Rodeo 2017 Motems Audit
- Phillips 66 Port of LA Berth 150-151
- NYCEDC On-Call 2016 Battery Wharf Rehabilitation

A.3 CHIV

Project Manager – Bradley Haley

7467 Ridge Road, Suite 200, Hanover, MD 21076 USA

Brad is a Project Manager and an Instrumentation and Control System Technologist with over 25 years of industrial experience. He has specialized in LNG engineering, providing consulting engineering services to various clients. He also has extensive experience Refinery, Conventional Oil, Power Generation, Natural Gas Processing and Liquified Petroleum Gases.

During Brad's career he has been an Owner's Engineer, Proposal Manager, Project Manager, Program Manager, International Work Share Coordinator, Lead Instrumentation and Control Specialist and client contact for various large, small, and single discipline projects. Brad has been a key contributor to many projects and has experience in Detail Engineering, Construction Support, Start-up, and Commissioning Support.

Senior Mechanical Engineer – James Kelly

7467 Ridge Road, Suite 200, Hanover, MD 21076 USA

Jim is a Senior Mechanical Engineer with over 40 years of industrial experience. For the last 30 years he has specialized in LNG engineering, providing consulting and engineering services to clients involved throughout the entire LNG Value Chain including pre-treatment, liquefaction, export, transportation, import, storage, and re-gasification of LNG, including extensive experience with peak shaving facilities. Jim also has extensive experience in Chemical, Petrochemical, Liquified Petroleum Gases, Cryogenic Design, Natural Gas Processing and Power Generation.

During Jim's career he has been an Owner's Engineer, Regulator's Engineer, Project Manager, Engineering Manager, Mechanical Engineer, and client contact for various large and small projects. Jim has experience in Conceptual Design, Front End Engineering, Detail Engineering, Construction Support, Commissioning and Owner Engineer.

Senior Process Engineer – Danny Buswell

7467 Ridge Road, Suite 200, Hanover, MD 21076 USA

Danny is a Chemical Engineer with over 14 years of industrial experience. He has specialized in providing engineering and consulting services to clients within the Liquefied Natural Gas (LNG) industry. Danny also has experience in Power Generation, Dry Bulk Handling, Natural Gas, and Food and Beverage projects.

During his career he has performed in various roles as an Owner's Engineer, Project Manager, and Process Engineer on various large and small projects. Danny has been a key contributor to many projects and has experience in Conceptual Design, Front End Engineering, Detailed Engineering, Construction Support, Commissioning and Optimization.

Danny has been involved in RFP/PO/MOC/Contract reviews, Total Installed Cost and Manhour Estimating, Process Simulations, PFD/P&ID Design, Heat & Material Balance Development, HAZOP/HAZID Processes, Fire Water Systems, Tank Design, Electrical Systems, Instrumentation and Control Design, Static and Rotating Equipment design.

Process Safety Engineer – Zachary Dotson

11700 Katy Freeway, Suite 1350, Houston, TX 77079 USA

Zachary has worked for CH-IV International for 7 years since entering the workforce as an LNG Consultant, while gaining experience in other industries such as chemicals and refineries through supporting various projects as a Process Engineer. He also has LNG safety and regulatory experience from various projects.

Senior Mechanical Engineer – Ramiro Rivadeneira

11700 Katy Freeway, Suite 1350, Houston, TX 77079 USA

Ramiro has over 15 years of functional experience as Lead, Principal, Senior and Supervisor in Mechanical Engineering design, construction, QA/QC, equipment testing for complex capital projects for the Oil & Gas industry. Including large greenfield & brownfield facilities in midstream Liquefied Natural Gas (LNG), Oilfield, and Refinery.

Major accomplishments include: Chevron's premiere Wheatstone LNG facility (Bechtel OG&C largest EPC) led a large team of 55 mechanical engineers to execute on time requisition, purchase and execution of over 90+ mechanical purchase orders & subcontracts including large rotating GE compressors & GE gas turbines, static and packaged equipment; U.S. Department of Energy (DOE) Strategic Petroleum Reserve (SPR) LE2 project, Ramiro led a team of mechanical engineers for design, optimization and implementation of on 30+ task packages including a new modularized and transportable vapor gas plant and additional capital improvements.

Senior I&C Engineer – Alexis Porter

7467 Ridge Road, Suite 200, Hanover, MD 21076 USA

Alexis is an Instrumentation and Control System Engineer with over 10 years of industrial experience. She has specialized in LNG engineering, providing consulting engineering services to various clients. She also has extensive experience in Refinery, Natural Gas Processing and Liquified Petroleum Gases.

During Alexis's career she has been an Owner's Engineer, Project Manager, Deputy Project Manager and Lead Instrumentation and Control Engineer for various clients.

Alexis has been involved in Total Installed Cost and Manhour Estimating, developing, and reviewing of P&IDs, Cause and Effect drawings, Control Narratives, Control System Architecture drawings, Instrument & Control Systems Specifications, participate in FAT, SAT, LOPA's and HAZOPs, and providing technical advice to other engineers.

Senior Civil / Structural Engineer – Lex DeGroot

11700 Katy Freeway, Suite 1350, Houston, TX 77079 USA

Lex is a Civil / Structural Engineer with over 22 years of experience in the engineering, design, and construction field. He has 14+ years of experience in Civil / Structural Design in the Oil & Gas / Petrochemical industry (Familiar with IBC, ASCE, ACI, and AISC) as well as 8+ years of Construction experience in Heavy Infrastructural projects. He has specialty experience in underground and concrete structures, such as tunnels, parking garages and bridges.

During Lex's career he has been an Owner's Engineer, Proposal Manager, Project Manager, Lead Discipline Manager, and client contact for various large, small, and single discipline projects. Lex has been a key contributor to many projects and has experience in Detail Engineering and Construction Support.

Senior Electrical Engineer – Rex Scott

7467 Ridge Road, Suite 200, Hanover, MD 21076 USA

Rex is an Electrical Engineer and a Project Manager with over 35 years of industrial experience. He has specialized in LNG engineering, providing consulting engineering services to various clients. He also has extensive experience Refinery, Conventional Oil, Power Generation, Natural Gas Processing and Liquified Petroleum Gases.

Rex has been involved in Owner's Consultant/Engineer, conceptual/feasibility studies through FEED, detailed engineering, commissioning, start up support and operations.

Senior Environmental Consultant – Angie Minton

11700 Katy Freeway, Suite 1350, Houston, TX 77079 USA

Angie has been a consultant providing program/project management, environmental, and planning services to public and private sector clients since 1996. Angie has over 25 years of professional experience leading multi-disciplinary teams in the delivery of complex architecture/engineering (A/E) projects, primarily focused on pre-construction activities. Has a broad technical expertise including land use, community redevelopment, public infrastructure, energy, socioeconomics, transportation, and urban design. Specialized experience executing energy, environmental, and water resources solutions that integrate recreation, natural resource management, flood risk management, hydropower, navigation, water supply, wastewater, storm water, ecosystem restoration, and watershed management applied most recently to LNG projects.

Senior Project Services Consultant – Randy Alton

11700 Katy Freeway, Suite 1350, Houston, TX 77079 USA

Randy is a project services professional experienced in contracts, estimating, cost, schedule, progress measurement, reporting, document management and business development.

A.4 Stanley Consultants

Senior Project Manager - Charles Spooner

Sunny Plaza Suite 204, 125 Tun Jesus Crisostomo St, Tamuning GU, 96913

Chuck is a Senior Project Manager with over 40 years of industrial and consulting engineering experience. Chuck has been involved with the GPA EPCM New Generation project since 2017. Chuck is stationed in Guam.

Appendix B: K&M Team Background

B.1 About K&M (LNG Lead and LNG-to-Power, Thermal Generation, and PPP Specialist)

A Trusted LNG and LNG to Power Leader

K&M's experience with LNG projects emerged from its work advising and developing gas-fired power plants in emerging markets. This experience includes advising on estimating LNG supply and storage requirements, identifying and analyzing various LNG import terminal solutions, developing technical specifications for LNG Sales and Purchase Agreement (SPAs), developing technical specifications for LNG terminals, assessing global LNG markets, competitively procuring LNG supply contracts, developing technical specifications for the power plant and interconnection lines, as well as other integral components. K&M has advised on 12 LNG to power projects across 14 countries to supply more than 2,500 MW of power generation capacity.

A Proven Track Record Leading PPPs to Financial Close

K&M's experience includes advising on several first-of-a-kind power transactions where K&M structured and executed the competitive procurement processes and established standards and procedures that became the template for future projects. K&M has an unmatched track record as transaction advisor leading 19 IPP / PPP power generation projects to financial close totaling over 9,900 MW of capacity and USD 11.9 billion in investment. In this role, K&M was directly responsible for designing the competitive procurement process (including a comprehensive request for proposal document and suite of project agreements), drafting the requests for qualifications and proposals, evaluating statements of qualifications and shortlisting bidders, responding to questions from bidders, evaluating proposals, and supporting negotiations. Seven of these projects were the first IPP/PPP projects in their home countries in their respective power sectors, and in some cases, in any sector.

As an expert in tender design and execution, K&M understands and has managed all of the key aspects of competitive bid processes including (i) transaction and tender design, (ii) structuring and drafting bankable project agreements, (iii) establishing bid evaluation criteria that are efficient, transparent and effective, and (iv) supporting post-bid negotiations to ensure bidder compliance and a successful financial close.

Understanding Switching Economics – HFO/Diesel to LNG to Power

K&M knows how to assess fuel-switching economies. In West Africa, K&M identified small, medium, and large-scale energy users currently using HFO / diesel to meet their energy needs. This included a 50 MW power station in Liberia operated by Liberia Electricity Corporation (LEC). Using an LNG supply chain least-cost model, K&M analyzed the business case for each potential LNG customer to switch from HFO / diesel to LNG.

In Aruba, K&M performed an independent review of the HFO to LNG business case for Water en Energiebedrijf Aruba N.V. (WEB) who is envisioning a power plant with a capacity of around 200 MW. K&M is also working with the Caribbean Utilities Company (CUC) in the Cayman Islands to review and finalize a work-in-progress version of its LNG-to-Power strategy it seeks to replace imported diesel as its primary fuel source. At Turks and Caicos K&M conducted a feasibility study for converting the existing units and planned power plant expansion from diesel to LNG.

Experience with Institutional Support and Capacity Building

K&M provides PPP institutional capacity and training as part of its advisory services. Currently for the MCC, K&M is providing a range of PPP support services in the Northern Triangle (Guatemala, Honduras and El Salvador). These include assessing the viability of candidate PPP projects, reviewing and drafting requests for proposals and terms of reference for advisors, developing budgets for advisory services, reviewing deliverables from advisors, advising on PPP policies and regulation, and providing on-the-job and classroom training to officials working at the PPP unit or at contracting agencies. In Panama, K&M recently led a two-day training and capacity building workshop for the World Bank to strengthen the Bank's wastewater pollution management capacity and to improve its understanding of PPP contracts related to water and sanitation projects.

As the Lead Transaction Advisor for Jordan's first PPP power project, Amman East, K&M provided on-the-job training to counterpart staff in the Ministry of Energy and Minerals and NEPCO. This enabled Jordanian officials to independently effectively procure three additional PPP power projects under the PPP framework K&M developed. K&M has also recently conducted a training seminar for public officials from the Government of Ghana and prepared a manual for the government of Thailand on conducting project appraisals and market sounding for PPP infrastructure projects.

B.2 About COWI (LNG Marine Infrastructure Specialist)

From being founded in a small flat in Copenhagen in 1930, COWI has grown to become a leading international consulting group with roughly 7,000 employees worldwide. COWI is headquartered in Kongens Lyngby, north of Copenhagen, Denmark, and maintains more than 70 subsidiaries and branch offices in Asia, Europe, the Middle East, Africa and the Americas as well as a large number of project offices that operate in accordance with the requirements of the individual projects. COWI works with all aspects of energy planning, production, and distribution within bioenergy and thermal power, wind, solar and renewable energy and oil and gas. With more than 400 marine specialists, COWI brings a comprehensive range of consulting services in all aspects of wind, marine and coastal projects and draws upon its in-house expertise in geotechnical engineering, traffic planning, roads, rail, bridges, oil and gas, health and safety, environment and economics.

With the substantial growth of the LNG fuels industry around the world, COWI has been part of the development at the sending and receiving ends of the LNG process. COWI knows how to properly develop and design all major areas of LNG project delivery, from Site Screening and Feasibility to FEED and through to Operations. In well over 45 LNG projects worldwide, COWI has delivered consistent results that have been recognized by Engineering News Record (ENR) Annual Survey, placing 4th amongst all international consultants in Marine & Port Facilities in the most recent rankings. With an LNG pedigree that is second to none, COWI has the capabilities to fully understand, integrate and apply our extensive knowledge to all phases of an LNG project, from concept and feasibility, through FEED to detailed design and construction. This includes the ability to seamlessly tie the structural components of a project to its commercial and development aspects.

The breadth and depth of COWI's experience in design, inspection and construction engineering enables us to contribute to the creation and operation of the world's most challenging infrastructure. COWI's innovative solutions shape the way people and commerce move; whether it be a bridge or tunnel connecting communities or marine terminals connecting the world. COWI has a capacity to take on complex specialty assignments and is a leading

international consulting group that provides state-of-the-art services within the fields of engineering, environmental science, and economics with due consideration for the environment and society. COWI combines global presence with local knowledge to take on projects anywhere in the world – no matter how large or small.

B.3 About CH IV

CH·IV International is a global engineering and consulting firm that provides full spectrum solutions to asset developers, regulators, owners, operators and lenders across the energy, infrastructure and resources industries. CHIV's team of expert advisors work in close partnership with their clients to ensure that their assets are developed, designed, constructed and operated safely, in accordance with the project's technical and commercial specifications while adhering to regulatory and environmental requirements. CH·IV is the independent engineering and consulting arm of Clough Group, providing fully integrated, end-to-end solutions. CH·IV International was established in 2001.

CH·IV service offerings include Engineering, Consulting, Project Services and Solutions, and Regulatory and Environmental Support.

With a multidisciplinary engineering team, CH·IV serves a variety of projects from Conceptual Design and Feasibility, preparation of Pre-FEED and FEED, through Commissioning and Startup of facilities. CHIV team of experienced engineers ensure implementation of Safety in Design and perform Process and Plant Optimization and Debottlenecking studies, followed by providing action-plan recommendations.

With depth of project design and execution experience, our consulting group provides advisory and Subject Matter Expert services to the industry. CH·IV Consulting services range from technical and commercial to environmental and regulatory, and span through the lifecycle of the project.