



PROPOSAL

**RFP 24-08 – Docket No. TBD, Entergy
Louisiana, LLC, ex parte. In re: Request for
Proposal for Long-Term Developmental
Combined-Cycle Combustion Turbine
Resources.**

Critical Technologies Consulting, LLC

Innovative Ideas for Shaping the Future
September 3, 2024

Critical Technologies Consulting, LLC

Kathryn H. Bowman
Executive Counsel
Louisiana Public Service Commission
602 North Fifth Street (Galvez Bldg)
P.O. Box 91154
Baton Rouge, Louisiana 70821-9154

September 3, 2024

Dear Ms. Bowman,

We are pleased to submit this Proposal to the Louisiana Public Service Commission for outside consultants related to RFP 24-08 Docket TBD, Entergy Louisiana, LLC, ex parte. In re: Request for Proposal for Log-Term Developmental Combined-Cycle Combustion Turbine Resources. This proposal addresses Entergy's notice dated July 23, 2024. Entergy has indicated the anticipated filing will occur by September 23, 2024.

Entergy seeks this approval in accordance with the Commission's General Order dated November 10, 2014, regarding the selection of contract employees to represent the Commission.

Critical Technologies Consulting, LLC, (CTC) with our main office located in Mesa, Arizona, and satellite offices in Massachusetts, New Jersey, Kentucky, and Louisiana is registered as a small woman-owned business that specializes in consulting and independent engineering, procurement, and construction management (EPC) consulting in energy and power projects. We are made up of a group of highly specialized professionals with extensive credentials. As a team, CTC personnel have worked together on numerous projects over the past 37 years as you will see in our proposal. We have the knowledge, experience, and understanding of the issues, design challenges, appropriate costs, installation methods, and operational and maintenance issues that are being addressed in this Docket.

Our expertise and experience working with a variety of clients and our extensive Consulting, Engineering/Procurement, Construction Management, and Operations and maintenance experience with numerous energy projects including the design, construction, and operations of Combined Cycle Power Plants, ensures we will deliver the best value for this assignment.

CTC personnel participated in numerous Independent Engineering and Owner Engineering roles during the development and implementation of new Power Plants including Combined Cycle, Fossil, Nuclear, Geothermal, and Renewables.

CTC has extensive experience in the development of procurement processes resulting in the selection of specific types of technologies as well as EPC Contractors while representing the Owners including Combined Cycle Combustion Turbines.

Our personnel have also accomplished numerous independent engineering assignments for lenders and developers involving new Power Plant applications throughout the United States and Internationally.

We sincerely hope you find our proposal acceptable, and we look forward to working with you in this important Project.

CTC is prepared to perform the scope of Services as shown in RFP 24-08 for the cost of **\$288,070 and expenses of \$8,000**. This scope covers approximately a 20-month period.

Sincerely,

Ben Hill, President
Critical Technologies Consulting, LLC.

Critical Technologies

Consulting, LLC

Innovative Ideas for Shaping the Future

**Consulting, Engineering, Procurement, Construction
Management, Due Diligence, and Risk Management**



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PROPOSAL

EXECUTIVE SUMMARY

CTC is pleased to present our response to the recent RFP 24-08 Docket No. TBD, Louisiana Public Service Commission, ex parte. In re: Request for Proposal for Log-Term Developmental Combined-Cycle Combustion Turbine Resources. We have included in this proposal a Scope of Representation, a detailed proposed Action Plan, and a discussion of the anticipated Approach to supporting the Commission and Staff in this matter including a collaboration approach to work with Staff. To better serve the Louisiana Public Service Commission, its Staff, and the consumers, we are working closely to supply the services in this Docket. We also include the experience and qualifications of our team, our proposed rate schedule, and an estimate of the costs based on the scope of work and potential schedule for the assignment. We have no conflicts of interest in the execution of the work contemplated in this Docket.

CTC is an independent consultant, with specialized electric utility consultants on staff, which brings to the Public Service Commission and Staff a team of highly experienced personnel with the necessary electric utility technical, management, and regulatory expertise and backgrounds to provide real value to the Staff and the Commission.

CTC will assist Staff, Commissioners, and Entergy to perform the services identified in LPSC RFP 24-08 with the approval of Staff and the Commission.

In assisting Staff, CTC will review the application (including any direct testimony of witnesses, any supporting documentation, and any associated cost effects); participate in ELL's RFP process, as well as any certification proceeding(s) arising therefrom. For the RFP process, assistance will include participation in each stage thereof, including technical and bidders' conferences, review of and comment on draft documents, informal meetings, preparation of a report upon completion of the RFP process, coordination with the independent monitor, and any other steps necessary to ensure a fair and reasonable RFP process.

Additionally, CTC shall be available to participate in informal conference calls, pre-trial conferences, depositions, hearings, meetings, and conferences with the Commission and Staff, as well as attending any B&Es related to any certification proceedings arising from the RFP. The scope of the work shall continue through the conclusion of the certification docket(s) through a Commission vote, regardless of whether the said vote is the result of a stipulated agreement or contested hearing recommendation.

As outside consultants to the Staff and Commission, our allegiance is to the Commission, its Staff, and the Rate Payers of Louisiana. We, CTC do not have any conflict of interest in this matter.

The CTC team's experience consists of many years of being involved in the engineering, design, construction, and operation of Combustion Turbine Combined Cycle Plants including the



advanced “H” combustion turbines available today. We have also been involved in a large number of Independent Engineering and evaluations for project investors, Lenders, and regulatory agencies involving large and small size CTCC projects. We bring a broad range of technical, industrial, and commercial-related expertise involving electric utilities, independent transmission developers/operators, independent power producers, Independent System Operators (ISOs), Public Service Commissions at various states, and other federal and state governments throughout the US which is directly applicable to the needs and the participation in ELL’s RFP process and any other issues involved in this Docket.

In summary, The CTC Team uniquely provides the Staff with the degrees of competence and the amount of practical experience in the field of public utility practice, and similar practices before this or other regulatory agencies, and familiar knowledge of ratemaking standards and regulatory law. The CTC Team is committed to collaboratively working closely with Staff, the Commissioners, and ELL to successfully complete the objectives established by the Commissioners for this Docket.

We have included in this proposal a Scope of Representation, a proposed Approach and Action Plan, to support the Commission Staff in this matter. We also include the experience and qualifications of our team, our proposed rate schedule, and an estimate of the costs based on the scope of work and potential schedule for the assignment.

CTC brings to the Staff a team of highly experienced personnel with the necessary technical, utility, and regulatory expertise and backgrounds in project development, and evaluations to provide real value to the Commission in evaluating ELL’s RFP process for long-term developmental Combined Cycle Combustion Turbine.

The CTC team will assist the Staff and bring the CTC team’s experience collaboratively in the design and independent reviews of the ELL procurement processes.

We include in this proposal materials that describe our expertise and qualifications, along with a narrative that describes our anticipated approach to supporting the Commission Staff in this matter. We do not have any conflicts of interest that would impair our ability to provide these services to the Commission and we are free to do so.

CTC is prepared to perform the scope of Services as shown in RFP 24-08 for the cost of **\$288,070 and expenses of \$8,000**. This scope covers approximately a 20-month period.

INTRODUCTION

Critical Technologies Consulting (CTC) is pleased to submit its proposal to the Louisiana Public Service Commission to assist staff in regards to ELL’s request for a proposal for Log-Term Developmental Combined-Cycle Combustion Turbine Resources.



SCOPE OF REPRESENTATION

The scope of representation covers both participation in ELL's RFP process, as well as any certification proceeding(s) arising therefrom. For the RFP process, CTC assistance will include participation in each stage thereof, including technical and bidders' conferences, review of and comment on draft documents, informal meetings, preparation of a report upon completion of the RFP process, coordination with the independent monitor, and any other steps necessary to ensure a fair and reasonable RFP process.

In addition to the RFP process, CTC will review any certification application(s), along with testimony and exhibits; draft and assist in the drafting of data requests; analyze data responses; participate in formal status conferences, pre-trial conferences, depositions, and hearings (whether contested or stipulation); draft and prepare pre-filed testimony in support of Staffs ultimate recommendations, together with exhibits supporting the pre-filed testimony; review and respond to any rebuttal testimony; assist in preparing any necessary direct and cross-answering testimony; assist in trial preparation, including cross-examination of witnesses and drafting pleadings, motions, and exceptions related thereto; review and analyze potential stipulation terms; and assist in drafting briefing sheets and orders of the Commission, as necessary.

On July 23, 2024, Entergy Services, LLC, on behalf of ELL, filed a notice letter with the Commission indicating its intent to issue an RFP for long-term developmental combined-cycle combustion turbine ("CCCT") resources on behalf of ELL ("Notice Letter).

ELL intends to issue a draft RFP no earlier than September 23, 2024, with the final RFP issued at least 60 days following the issuance of the draft RFP, which complies with the Commission's Market-Based Mechanisms General Order ("MBM Order") notice requirements.

The draft RFP would be open to developmental CCCT resources in the Midcontinent Independent System Operator, Inc., Local Resource Zone 9. Further Entergy Services expects that the RFP will market test self-build generating projects to be located in the Amite South planning region and at the Nelson site; therefore, an independent monitor has been retained by ELL. Mr. Wayne Oliver has been selected as the procurement process independent monitor; he has had no business relationship with ELL in the last three years other than in the capacity of an independent monitor.

Additionally, CTC shall be available to participate in informal conference calls, meetings and conferences with the Commission and Staff as well as attending any B&Es related to any certification proceedings arising from the RFP. The scope of the work shall continue through the conclusion of the certification docket(s) through a Commission vote, regardless of whether said vote is the result of a stipulated agreement or contested hearing recommendation.

PERIOD OF REPRESENTATION

The time period estimated to complete the Scope of Representation will last approximately 8



months for the RFP process, and if sources are selected through the RFP process, approximately 10-12 months for the certification proceeding(s).

PROPOSED APPROACH AND PLAN OF ACTION

The Proposed Plan of Action to assist Staff is broken into various **Tasks** shown below using the Scope of Representation and scope of work presented in the Request for Proposals RFP 24-08.

A **Kick-off session** will be held with Staff to meet and greet the key personnel, identify key roles and responsibilities, agree on the various aspects and Task definitions of this assignment, review prior work accomplished by the Commission's Staff, and the expected schedule of activities.

The Definitions of the **Tasks** are as follows:

1. **Review** any briefings, reports, and documents which have been provided by ELL to the LPSC Staff up to this point.
2. **Establish coordination with Staff** to discuss and prioritize those issues or points the Staff may want assistance with from CTC. Sign confidentiality agreements to allow the review to be conducted properly.
3. **Review documentation** submitted or to be submitted by ELL on their Request for Proposals for Long-Term Developmental Combined Cycle Combustion Turbine Resources and once the selection(s) are made, the ELL submittals for the Applications for Certification and potential cost recovery.
4. We will review in detail the basis and documentation including estimates and potential equipment costs for the self-build generation alternative ELL will be providing.
5. **Requests for Information (RFIs)** will be requested to ELL at key stages of the RFP Process and Certification processes to identify any impacts on Louisiana ratepayers and following these key criteria:
 - a. Whether or not a resource will provide reliable service at the lowest reasonable cost.
 - b. Whether the considered resource(s) is able to meet the needs for capacity resources.
 - c. Identify the resource planning methods to improve the efficiency of ELL's power supply operations and whether the utility is making use of any such methods.
 - d. Any other basis for the justification to proceed on any specific solutions.
6. **CTC will develop conclusions** from the reviews conducted to achieve the objectives of the Commission, and assist with the drafting of Staff recommendations, A **Summary Report** (PowerPoint format) will be issued for discussion with the Staff and the Commissioners to identify the key issues which need attention.



Select CTC experts will attend and testify at the Commission's Business and Executive Sessions as needed. This task will be further identified and approved by Staff once CTC jointly with Staff determines the specific issues the CTC team will be called upon to defend, participate in, and testify on.

7. **CTC will act as a catalyst to hold collaborative discussions** with ELL to identify and develop solutions to the potential risk issues which may be identified during this developmental phase of the process.
8. **CTC may visit selected Sites** to review the adequacy of new plants that are to be built in the Amite South planning region and at the Nelson site.
9. CTC commits to work jointly with the Staff, the Commission of the LPSC, and ELL in implementing this independent review.

DELIVERABLE PRODUCTS

CTC will develop reports and documentation as requested by Staff.

There are reports CTC has presently identified as part of its proposed Action Plan for use to communicate with Staff and jointly develop strategies and plans to support the Commission on this Docket. These reports will be issued in PowerPoint format and are as follows:

Progress Report

At the beginning of every month, a progress report covering the activities accomplished the prior month will be issued in PowerPoint format to Staff to indicate what has been accomplished, the key issues being addressed, schedule progress, cost monitoring, and any recommendations CTC may have for Staff to consider.

Project Independent Review Report:

A summary report will be issued identifying the documents reviewed, the status/results of the RFIs, and the preliminary conclusions based on the documents and responses received. This report will be reviewed with the Staff and comments discussed and resolved.

CONFLICTS OF INTEREST

CTC and its personnel do not have any conflicts of interest concerning this Docket scope of representation and none of the CTC personnel have any work with ELL or any of the entities subject to the Louisiana Public Service Commission (LPSC) regulatory responsibilities.

CTC personnel have worked in the past for various utilities, public service commission staffs, ISOs, IPPs, regulatory bodies and other entities in the power and oil and gas fields as part of



their employment history with other companies in the past. Their resumes indicate that kind of experience.

CTC RESUME AND QUALIFICATIONS

The CTC team has the requisite knowledge of the topics involving this Docket and discussed in the RFP 24-08, in addition to those provided in the Commission's General Order dated November 10, 2014. CTC has been pre-qualified by the Commission to receive this RFP under Docket TBD.

CTC has assembled a very experienced and qualified team of personnel with the requisite knowledge, of the topics covered in the RFP's Scope of Representation and the proposed Action Plan to achieve the Commission's strategic objectives under this Docket.

Key personnel among the CTC personnel have substantive experience with the development of and installation of numerous Combined Cycle Combustion Turbine Projects and the challenges they pose.

CTC is familiar with and has experience involving the development, engineering, construction, certification, and cost-allocation as well as the operation of the LPSC requirements applicable to LPSC-jurisdictional electric utilities, including state and federal jurisdictional and regulatory compliance issues related to generation planning and construction. In addition to those CTC personnel are qualified and are prepared to render expert testimony regarding and have knowledge of:

- 1) Public interest criteria for approval and monitoring of electric generating and transmission facilities.
- 2) Construction, design, and operation of generation facilities.
- 3) NERC, SERC, SPP, MISO, and any other applicable standards associated with bulk electric generation facilities to be located within Louisiana.
- 4) Environmental criteria associated with the design and construction of bulk electric generation facilities.
- 5) Appropriate accounting standards and practices applicable to ELL Projects.
- 6) Cost allocation methodologies for the allocation of investment and expenses among affiliates and utilities, including the relationship of a parent company to its subsidiary operating companies; the transfer of investment and costs among affiliates and utilities, and the provision of services among affiliates and utilities.
- 7) Applicable utility tariffs, including, but not necessarily limited to SPP and MISO tariffs.
- 8) Principles associated with resource acquisitions and the competitive process, including but not limited to analyzing utility resource needs and whether the considered resource(s) is able to meet those needs, particularly for combined cycle combustion turbine and renewable/solar resources.
- 9) SPP and MISO tariffs, rules and planning processes, generally, and specifically related to resource adequacy planning processes and use of zonal resource credits.



The CTC personnel team is experienced in participating in technical and bidder's conferences, experienced in drafting and rendering expert testimony, and cross-answering testimony, be able to be cross-examined with respect to all of the issues addressed in this RFP, which are likely to arise in these proceedings, and be qualified and prepared to render expert testimony regarding the topics in this RFP at a hearing and/or B&E.

The team will be led by Al Ferrer with technical support from Ben Hill (Construction Expert), Dwayne Templet (Construction Planning Expert), Don Cecich(Combustion Turbines-Combined Cycle Expert), and Reinhard Maier also a CTCC Expert. We will have Chris Justin as the lead interface with the Commission. Chris is a resident of New Orleans and can be at the Staff's offices within an hour or so of any requests.

CTC consultants also have a working knowledge of LPSC rulemaking and jurisdictional issues, and have knowledge of:

1. The Commission's Rules and Orders pertaining to the RFP process and acquisition of power supply resources, including but not limited to the Commission's MBM Order and its 1983 GO, as amended.
2. Principles associated with resource acquisitions and the competitive process, including but not limited to analyzing utility resource needs and whether the considered resource(s) is able to meet those needs.
3. Whether or not a resource will provide reliable service at the lowest reasonable cost.
4. Resource planning methods to improve the efficiency of a utility's power supply operations and whether the utility is making use of any such methods.
5. Familiarity with "just and reasonable costs and prudent investments" associated with providing reliable and quality service as recommended by NARUC. Our team has evaluated the costs and schedules of many CTCC projects in the US and overseas.
6. Public interest criteria for approval of resources and purchase power contracts.
7. LPSC rules on affiliate transactions and cost recovery mechanisms for power supply resources, ELL's current rate structure, and the Commission's General Order dated November 6, 1997, in Docket No. U-21497 regarding fuel cost recovery.
8. Appropriate accounting standards and practices for electric utilities, especially those for investor-owned utilities.
9. A detailed understanding of the major functional areas of a regulated electric utility, particularly one that is investor-owned.
10. MISO tariffs, rules, and planning processes, generally, and specifically related to resource adequacy planning processes and use of zonal resource credits, specifically Local Resource Zone 9, but not necessarily limited to LRZ 9.

CTC will provide technical advice regarding CCCT industry standards and widely accepted industry practices regarding generation, transmission grids, and the maintenance thereof, as outlined above.



The CTC team has consulting personnel who are licensed engineers and in good standing with applicable engineering licensing and certification boards.

More specifically, the team assembled by CTC for this assignment, are experienced professionals in multidisciplinary areas specifically applicable to the needs specified in this Docket including CCCT projects:

- Engineering and design, procurement, and construction of all aspects of electric generation, transmission, and distribution including:
 - Switchyards, substations, grids and microgrids, energy storage, and utilizing lines at various voltages including 550 kV down to 4 kV.
 - Transmission towers and structural support systems made of wood, composites, reinforced concrete, and steel.
 - Renewable and other generation supply types.
 - Emergency planning and restoration planning for various disruptive events.
 - Drone inspection systems.
- Project Technical/Financial Transactions.
- Asset Acquisitions.
- Program Designs.
- Program Management and Operations and Maintenance Management.
- Engineering, Procurement, and Construction Management from generation plants to transmission and distribution systems at various locations throughout the country.
- Independent technology evaluations of CCCT's.
- Independent evaluations of generation, transmission, and distribution systems.
- Commercial and regulatory evaluation of new technology developments.
- Emergency plans and restoration programs development involving disruptive events at renewable, fossil, gas, and nuclear power stations.
- Development of resiliency plans and programs

CTC professional experience consists of a combined expertise of:

- Our team has an average of 37 years of experience of working in the engineering field involving engineering, procurement, construction, and operations and maintenance services to electric utilities from generation to transmission, distribution to interconnection to residential, commercial, and industrial customers and the management of such services.
- Bringing the potential of over 40 personnel with a variety of specialized expertise in the areas important to the issues on this Docket TBD.
- Since the mid-1980s, CTC personnel have worked on over 300 projects involving independent engineering services and consulting with a variety of clients, from utilities, lenders, investors, operators, DOE, PSC staff, local regulatory agencies, and many other clients in various states such as Arkansas, Louisiana, Georgia, Texas, Florida, Mississippi, Alabama, Missouri, Massachusetts, NY, Connecticut, Maine, New



Hampshire, Canada, Virginia, California, Arizona, New Mexico, North and South Carolina, Utah, and other states and international locations.

Successfully utilizing the strengths, talents, and expertise of our seasoned professionals, we provide customized, innovative, high quality and customer focused consulting services to the Staff. Our professionals have the industry expertise and knowledge to closely follow technical, managerial, and business market trends in the Power industry covering generation, transmission, and distribution systems.

RECENT ASSIGNMENTS

Client	Description	Location
City Public Service	4 LM6000 Combined Cycle units. Owner Engineer. Performed numerous studies to determine the correct technology, prepared bid documents (RFPs), and evaluation criteria of bid documents, was responsible for awards to EPC Contractors, and monitored the design, engineering, and construction.	San Antonio, Texas
Louisiana Public Service Commission Staff	Proceeding to Examine Options Pertaining to Pole Viability, Pole Attachments, and all Areas that may Affect the Reliability and Sustainability of Louisiana’s Electric Utility Distribution Grid (Dockets R-35394 and R-36226)	State of Louisiana
Stone Pigman (Representing LPSC) Denton (representing CNO)	Technical reviews/reports/testimony related to the Grand Gulf Nuclear Power Plant imprudence case before FERC.	Grand Gulf Nuclear Power Plant Louisiana City of New Orleans
Mississippi Public Service Commission Staff (MPUS)	Conducted Independent Engineering due diligence on the new 600 MW Integrated Gasification Combined Cycle (IGCC) – including the technical and commercial viability, cost, schedule, engineering, and construction monitoring, including 7 switchyard modifications and 150 miles of new Transmission poles and cabling.	Kemper Project Meridian, MS
West Virginia Public Service Commission	Detailed Prudence review of costs associated with three (3) coal power plants related to disregard of direction from the Public Service Commission Orders.	West Virginia
Cohen Milstein Law Firm	Detailed Prudence and Fraud reviews associated with costs of the V.C. Summer Nuclear Power Plants	South Carolina
Banking Lenders Group (Mizuho)	Independent engineering of a 1000 Liters/second desalination plant including 100 miles of 36” in-ground piping and 75 miles of Transmission poles and cables.	Antofagasta Chile
Private Investor	Conducted an independent technical evaluation and condition assessment of the transmission and distribution assets of a utility in Louisiana for potential lease or acquisition	Louisiana



Client	Description	Location
Florida Public Service Commission and FP&L	Conducted a detailed technical and commercial independent engineering due diligence and provided written reports and testimony on the prudence of FP&L in the implementation of various upgrades of the FP&L nuclear power plants and transmission systems to accommodate these upgrades	St Lucie and Turkey Point Nuclear Plants and switchyards and substations
Mississippi Public Service Commission Staff (MPUS)	Independent Engineering services and monitoring of the installation of a flue gas desulfurization system for (2) 500 MW Coal Fired Units – Cost, Schedule, Risk Management, and Construction Monitoring.	Plant Daniel Mississippi
Independent System Operator (ISO) New England	Conducted independent evaluations of the technical quality, costs, and schedules of projects in the ISO que to determine if they can meet the schedules agreed with the ISO	New England States
US Department of Energy Loan Guarantee Program	Participated in independent engineering assignments in over 15 transmission and renewable energy projects under the US DOE Loan Guarantee projects. Provided detailed IE reports on each project with an evaluation of the new technologies involved including commercial viability, assessment of the scoping, construction contracts and cost and schedules and risk management of each project. Conducted construction monitoring over these projects after financial close.	Various States in the US including Nevada, Arizona, Texas, California, etc.
Office of Arkansas Attorney General	Review for Prudence of actions and expenditures during forced outages for potential adjustment of customer rates for the Public Service Commission/AG Office.	Grand Gulf Nuclear Power Plant Arkansas Mississippi
AEI Energy El Arrayan	115 MW Wind Farm (50 Units) Acting as Independent Engineer representing the Lenders in reviews of the ongoing project and in approval of financial disbursements by the Lenders monthly. This also included 20 miles of new roadways and 45 miles of new transmission and distribution poles and cabling with 3 new switchyards.	La Serena, Chile
Georgia Public Service Commission Staff	Representing the Public Service Commissioners and the Ratepayers of the State of Georgia, CTC is responsible for the overall monitoring of the construction, financial, cost and schedule adherence, project progress, and providing twice yearly written and oral testimony in GPSC Hearings.	Vogtle Nuclear Power Plant Units 3&4 (New Construction)
PacifiCorp/ Rocky Mountain Power	Red-Butte 345kV Transmission Line Scope included design for this ~200-mile Greenfield transmission line with towers through the mountains of UT and the (2) remote substation expansions including the addition of a series capacitor.	Red-Butte, Utah
X24, 69kV Transmission and Distribution Reconducting & Refurbishment Project	Preparation of Scope Documents and Construction Documents. Engineered structure modifications and replacement structures in accordance with client, regional, and NESC standards. Analysis for various aspects of the transmission line using PLS-CADD. Calculated insulator swing and integrated it into the structure work list to determine where insulator swing issues existed and how much weight needed to be added to meet swing tolerance. Provided field support during construction.	Mass to Vermont



Client	Description	Location
AEI Energy and Lenders Jaguar Energy Guatemala	300 MW CFB Coal Project, Acting as Independent Engineer representing the Lenders in reviews of the ongoing project and in approval of financial disbursements by the Lenders monthly, including 70 miles of transmission and distribution poles and cabling.	Antigua, Guatemala
AEI Energy Fenix Project	520 MW Combined Cycle Project Acting as Independent Engineer representing the Lenders in reviews of the ongoing project and in approval of financial disbursements by the Lenders on a monthly basis including 66 miles of Transmission and Distribution poles and cabling and 1000 feet of outfall piping.	Lima, Peru
U.S. Department of Energy (DOE) Loan Guarantee Program	716 MW Integrated Gasification Combined Cycle (IGCC) – Cost, Schedule, Engineering and Construction Evaluation.	Taylorville, IL
US Department of Energy (DOE) Loan Guarantee Program	South Texas Nuclear Power Project Units 3 and 4 – Preparation of an Independent Project Review and Analysis including Preparation of the Cost and Construction of the project.	Bay City, TX
Rochester Gas & Electric	300 MW Coal Fired Power Plant – CFB Boiler Based Expansion.	New York
Reunion Power	35 MW and 45 MW Biomass Power Project FEED Study.	Ludlow, VT
Unistar	Independent technical and commercial review of the 1600 MW Gen 3+ Nuclear Power Project.	Calvert Cliffs, MD
Department of Energy	Oversight of the removal of the 440 Building, Nuclear Weapons Plant at Rocky Flats Environmental Technology Site	Rocky Flats, CO
Department of Energy	Complete Cost Estimate – Title I, Engineering Phase for the Accelerator Production of Tritium (APT) Project.	Los Alamos, NM Aiken, SC
Department of Energy	MFFF – Independent Evaluation of Project Construction Costs for Savannah River.	Aiken, SC

ESTIMATE OF COSTS

CTC presents below the schedule of hourly rates to be used for the services to be provided. Our standard hourly rates per hour normally vary per consultant from \$160.00/hour to \$425.00/hour, however, we have discounted our fees for the commission such that they range from \$135.00/hour to \$270.00/hour as shown below:

Rate Schedule for 2024:

Position	Standard Rate	Discounted Rate For RFP-24-08
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Senior Executive Consultant	\$425	\$270
Executive Consultant	\$395	\$265
Senior Consultant	\$310	\$210
Consultant	\$225	\$190
Construction Consultant	\$255	\$210
Senior Specialist	\$270	\$215
Specialist	\$245	\$195
Research and Management	\$180	\$155
Analyst	\$160	\$135
Expenses	Actual Cost	Actual Cost

For this assignment, CTC has developed a cost estimate of **\$288,070** for the scope of services to be provided. We have included expenses of **\$8,000**. Total assignment cost not to exceed **\$296,070**.

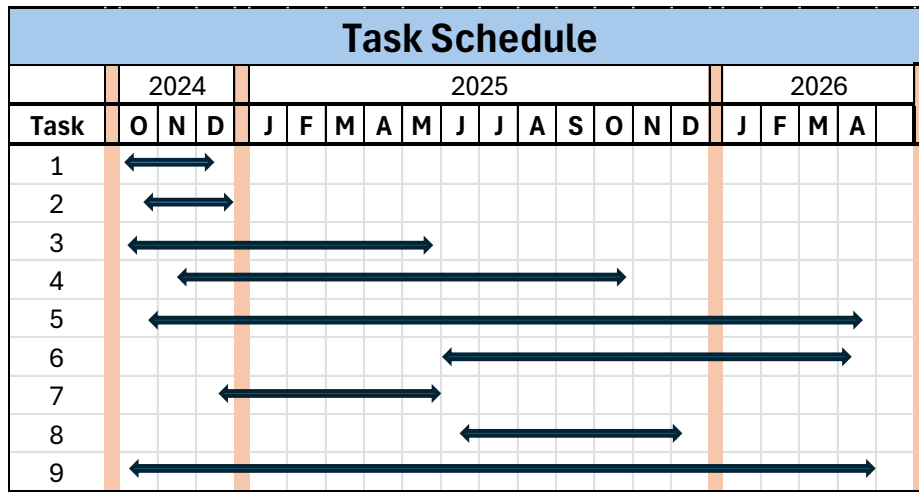
CONCLUSIONS

The CTC team believes that it is well qualified to provide the Staff with independent engineering expertise, innovation, codes and standards knowledge, utility knowledge, emergency planning, and the ELL RFP process for the potential of new CCCT's.

CTC key team members are experienced in participating in cases involving public utility regulation, including the presentation of direct testimony, reports, and recommendations, assistance in developing cross-examination of witnesses, and the analysis of comments and exceptions to proposed recommendations.

Collectively, the CTC professionals possess a full understanding and ability to assist Commission Staff in reviewing the issues related to this Docket. Indeed, the combination of our team members' educational backgrounds, achievements, specific expertise, and prior experience best positions us to provide the LPSC and Staff with the most innovative, extensive, and comprehensive consulting services to assist Staff in achieving the goals and objectives of the Commission for this Docket.

PROPOSED SCHEDULE – BY TASK



APPENDIX A

Detailed Breakdown of Costs

Task	Senior /Executive			Specialist			Construction & Technical			Research & Management		
	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	
Task	HRS	Rate	Total	HRS	Rate	Total	HRS	Rate	Total	HRS	Rate	Total
1	60	\$270	\$16,200	20	\$195	\$3,900	20	\$185	\$3,700	0	\$140	\$0
2	40	\$270	\$10,800	5	\$195	\$975	5	\$185	\$925	6	\$140	\$840
3	140	\$270	\$37,800	20	\$195	\$3,900	16	\$185	\$2,960	10	\$140	\$1,400
4	120	\$270	\$32,400	20	\$195	\$3,900	16	\$185	\$2,960	10	\$140	\$1,400
5	140	\$270	\$37,800	20	\$195	\$3,900	10	\$185	\$1,850	0	\$140	\$0
6	120	\$270	\$32,400	20	\$195	\$3,900	16	\$185	\$2,960	10	\$140	\$1,400
7	80	\$270	\$21,600	0	\$195	\$0	40	\$185	\$7,400	0	\$140	\$0
8	80	\$270	\$21,600	10	\$195	\$1,950	10	\$185	\$1,850	0	\$140	\$0
9	80	\$270	\$21,600	10	\$195	\$1,950	10	\$185	\$1,850	0	\$140	\$0
	860		\$232,200	125		\$24,375	143		\$26,455	36		\$5,040
Total all Task Work										\$288,070		
Expenses = Four (4) Trips at \$2000/Trip = \$8,000										\$8,000		
TOTAL ESTIMATED COST										\$296,070		



APPENDIX B

Key Personnel BIOS (Detailed Resumes previously submitted)



BEN HILL - BIO

President/Senior Executive Consultant

Bachelor of Science, Business Management – Stony Brook University

Certificate in Construction Project Management: University of Florida



As an Executive Consultant for Construction and Project Management in the Power market, provided all construction and project-related activities as well as Owner Engineering, Independent Engineering, and Construction Management Services.

Provided Construction and Project Consulting Services in the power arena including IGCC, coal, nuclear, gas, and renewables. Typical activities included overall project management, pre-construction studies such as labor analysis, cost studies and analysis, economic impacts, construction development of plans and procedures, nuclear plant outage coordination, project layout and reviews of conceptual designs, constructability reviews and preparation of bid documents. Performed post-construction claims mitigation and analysis to determine prudence of performance. Also performed acquisition due-diligence studies.

ALBERT FERRER - BIO

Executive V P – Independent Engineering & Consulting



/ Project Director



Al Ferrer, Executive VP, BS Mechanical, MS Nuclear Eng.

With over 40 years of professional experience in the US and international power and water industry, Mr. Ferrer manages our Worldwide Consulting Sector. He has extensive experience in Engineering, Independent Engineering, Due Diligence, Acquisition Services, Industry Plant Performance improvement, Operational Risk Management, Upgrades and Life Cycle Extensions, and numerous other services. He has directed and executed Projects in the US, Canada, Brazil, Mexico, Malaysia, Indonesia, Thailand, Japan, Korea, Peru, Chile, and Guatemala. He has experience implementing desalination, nuclear, gas, and combined cycle, biomass and biogas, geothermal, IGCC, circulating fluid bed, renewables such as solar, wind both offshore and onshore, and other industrial plant renewable generation technologies such as biodiesel, biogas, and algae-based fuels. He has directed and executed work in the US and worldwide. He has implemented various utility grade solar facilities of up to 150 MW and conducted due diligence on solar plants of up to 250 MW. He holds a BS in Mechanical Engineering and a MS in Nuclear Engineering and has participated in Executive Management Educational Programs.

Mr. Ferrer has been key to the Minera Spence project in maintaining an open and independent point of view on all the challenges Minera Spence Desal Project has experienced. He can be an invaluable asset in assisting the Lenders and Caitan achieve COD.

CONSTANTINOS (DINOS) NICOLAOU - BIO

Executive VP/Executive Consultant



Dinos Nicolaou, CTC-VP, MBA

Has over 40 years of experience in all areas of project controls, Financials, Earned Value Management System, Cost, Planning and Scheduling, Scope Control, and Risk Management for all phases of a project, at home and in field offices. His background encompasses several industries with most in power generation including Nuclear, and transportation projects. He has reported to all levels of Management including Presidents of major Companies and Deputy Secretaries (DOE) He has been an Executive Consultant representing the Public Service Commission of Mississippi, Arizona, and Georgia and Attorney General for the



State of Arkansas as an Independent Monitor on a multi-billion-dollar projects. He has been part of and led External Independent Reviews and Independent Cost estimates for DOE for 15 years throughout the USA.

CHRISTOPHER JUSTIN - PE

Senior Consultant

THE PENNSYLVANIA STATE UNIVERSITY, University Park, Pennsylvania

August 2005 – May 2009

B.S. degree in Chemical Engineering graduated with honors in May 2009

LICENSED PROFESSIONAL ENGINEER (#38632), Louisiana
ENERGY EFFICIENCY CONSULTANT, Emergent Grid Solutions
Plan Your Energy



Applied for the Department of Energy's Buildings Upgrade Prize. Created an in-depth plan to address the non-technical barriers to the adoption of energy efficiency (EE) upgrades in Louisiana

Obtained Letters of Support from the New Orleans Office of Resilience & Sustainability, Louisiana Housing Corporation (LHC), Greater New Orleans Interfaith Climate Coalition (GNOICC), Housing NOLA, A/C Ambulance, Feed the Second Line, etc.

Presented Home Energy Rebates opportunity to the Southeast Louisiana Coalition of the Air Conditioning Industry (SELACACI) board; surveyed members about EE upgrades.

Assisting the Department of Energy & Natural Resources (DENR) in developing federal programs compiling best practices for rebate implementation and advising DENR and LHC on how to maximize program efficacy.

Educating community stakeholders (GNOICC, Together Louisiana, etc...) and business leaders (SELACACI) on Home Energy Rebate programs.

Assisting Louisiana Public Service Commission in reviewing energy efficiency programs.



Researching cost-effectiveness and energy savings from EE programs in other states and comparing them with Louisiana’s EE programs. Met with several Commissioners and Staff to advise on braiding EE programs.

Redlined RFQ and RFP for selection of Program Administrator.

Helping midsize businesses develop and implement their growth marketing strategies.

REFINERY PLAN IMPLEMENTER, PROCESS ENGINEER, *Motiva (Shell/ Saudi Aramco), Norco Refinery*

Calculated Solomon Energy Intensity Index (EII) for the refinery.

Compared site’s actual energy consumption vs “standard” energy consumption for a refinery of similar size and configuration and helped inform site leadership on which opportunities to prioritize in order to maximize return on investment for energy saving projects.

Managed 24/7 business direction based on changing schedules and unit operating capabilities.

Directed Production Unit Managers toward the attainment of Daily Operating Plans and Summarized key activities daily for Motiva CEO and Site Leadership Team.

DWAYNE TEMPLET - BIO

Construction Specialist



Forty years of experience in overseeing multimillion-dollar construction and maintenance projects. Experience includes construction management, project management, QA/QC management, task management, electrical and instrumentation inspection and directly managing crews of up to 200 in a variety of projects. Backed by a proven history of on-time, on-budget, and high-quality project completion. Expertise includes EPCM and Self-Perform covering Turnkey Grass Roots, Unit Expansions, Capital Improvements and Outage/Turnarounds, Oil and Gas

Power, Nuclear Power, Petro-Chemical, Crude, Oil and Gas Fractionators, Hydrocrackers, Tank Farm, River Docks, and many more including various chemical and acid units.



CHRISTOPHER HILL - BIO

Senior Specialist



Business and Information Technology Executive with 26 years of experience in multiple industries. Excellent record of creating tangible benefits in large organizations. Areas of specialty are system configuration, resource utilization, process design, waste identification and elimination, and security and identity management. Highly effective in roles requiring project planning, scope analysis, communications, and deployment. CIO for an independent construction monitoring service and consulting firm.

- 24 years of experience in Information Technology Management in various industries: Industrial Construction, Aviation, Mill/Manufacturing, and big-box retail.
- 6 complete Life-cycle SAP implementations involving SAP R/3, APO, CRM, SCEM 5.0, BW, and NetWeaver.
- 20 years of experience in Fortune 500 Companies.
- Bilingual: English and Spanish
- Six Sigma Yellow Belt, Change Acceleration Process (CAP) Certification, Facilitation certified.

R. W. MAIER, P.E. - BIO

Senior Specialist

Rensselaer Polytechnic Institute
Master of Business Administration – 1985
University of Connecticut
Bachelor of Science in Engineering - 1972

PROFESSIONAL AFFILIATIONS:

American Society of Mechanical Engineers

My career includes 48 years of diversified power industry background. Experienced in electric power sales, project finance, project management, proposal preparation, project development, construction, plant commissioning, cost estimating, risk analysis, plant design, and environmental permitting for the electric utility, pulp and paper, and cogeneration power market. Power systems



aftermarket experience includes plant life extension programs, rehabilitation projects, and engineering services.

DONALD E. CECICH - BIO

Senior Specialist

MBA, Santa Clara University, 1978

BS, Mechanical Engineering, University of Nevada, 1973

Professional memberships:

Northeast Energy and Commerce Association

American Society of Mechanical Engineers

With over 40 years of experience, Don Cecich possesses proven skills in domestic and international industrial and power project development, management, marketing/business development, due diligence, and sales experience with large multinational corporations, mid-sized private firms, and small entrepreneurial businesses. His experience includes combined-cycle, simple-cycle, cogeneration, coal, geothermal, steam turbine generator, transmission and distribution, industrial, and energy conservation projects. Don worked for the General Electric Company for more than 12 years, holding positions in GE's gas turbine, medium steam turbine, and large steam turbine divisions. He joined Parsons Brinckerhoff (PB) after serving as vice president of a New England firm specializing in energy efficiency/demand-side management, inside-the-fence cogeneration, and water conservation projects. He joined Mott MacDonald after working for Parsons Brinckerhoff for more than 20 years as Vice President, US Industrial and Energy Services. He has been with Critical Technologies Consulting for the past 4 years performing due Diligence and Independent Engineering assignments.

TARA JENKINS - BIO

Research and Management

UNIVERSITY OF MEMPHIS – Memphis, TN Graduated August 2017

- *Bachelor of Business Administration (BBA), Accountancy*
- *Graduated Magna Cum Laude*

Highly motivated and proactive professional accountant with over 15 years of experience in accountancy and bookkeeping. Proficient in bookkeeping and project coordination. Confident in communication skills including negotiation and presentation; attentive to details, organized, and process-minded. Continually seeks process improvements and operational



efficiency including time-management and technology skills. Proficient with MS Office (Word, Excel, Outlook, PowerPoint), SharePoint, Sage (Peachtree), and QuickBooks. Comprehensive knowledge of accounting and auditing principles, payables/receivables, payroll functions, general ledger

postings, invoicing, as well as account reconciliations. Driven to succeed and to help businesses be more confident through consulting and collaboration.