PROPOSAL

RFP 25-09 – Docket No. U-37677:

Entergy Luisiana, ex parte.

In re: Application for approval to complete uprate project at the Waterford 3 Nuclear Power Station, including cost recovery



Kimberly N. O'Brian Kathryn H. Bowman **Executive Counsel** Louisiana Public Service Commission 602 North Fifth Street (Galvez Bldg) P.O. Box 91154

Baton Rouge, Louisiana 70821-9154

Phone: (225) 342-9888 Fax: (225) 342-5610 Email: kim.obrian@la.gov kathryn.bowman@la.gov

Dear Ms. Bowman,

We are pleased to submit this Proposal to the Louisiana Public Service Commission ("Commission" or "LPSC") for an independent engineering consultant, who will assist Commission Staff in the review of Entergy Louisiana LLC's ("ELL") application seeking Commission approval to complete an uprate project at Waterford 3 Nuclear Power Station.

CTC will assist Commission Staff in the review of the application of four witnesses, any supporting documentation, and associated cost models, draft data requests and review responses thereto, potentially participate in informal meetings with Staff and ELL, Staff and Intervenors, or Staff, ELL, and Intervenors, assist in drafting a recommendation (s), including testimony, to the Commission regarding the Company's request, 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 and motions related thereto, and review and analyze potential stipulation terms. CTC also assumes this will be a contested proceeding.

Critical Technologies Consulting LLC, (CTC) is based in Mesa, Arizona with offices in Wellesley, Massachusetts; Marlboro, New Jersey; Pittsburg, Pennsylvania; Arlington, Tennessee; and a satellite office in St Amant Louisiana, and consists of a team of seasoned nuclear power consultants with the expertise, knowledge, and understanding of the appropriate methods for all phases of nuclear design and construction in the United States covering the quality, safety, schedules, and costs of nuclear power plants with specific experience in the Uprate of numerous nuclear technologies. Our team of consultants has worked

August 7, 2025



on over 30 nuclear power plants in every aspect of the nuclear lifecycle. We have conducted numerous independent nuclear power plant reviews and evaluations for uprates and upgrades of various reactor types similar to Waterford 3. We also have extensive experience in regulatory governance, monitoring major projects, and rendering both written reports and oral testimony and were subjected to cross examinations.

Our Independent expertise and experience with Utilities and Regulatory Agencies, and our extensive Technical, Construction Management, Financial, Commissioning, Scheduling, Cost, and Estimating experience with numerous Nuclear and Fossil-Fueled power projects will ensure that we will deliver the best value for the Commission Staff and the Louisiana Ratepayers.

Starting the engineering and construction of a nuclear power plant uprate presents numerous challenges and issues both to the Utility/Owner as well as other stakeholders. CTC has extensive experience in monitoring and reviewing the plans, progress, and quality of nuclear power plant uprates, construction and modification efforts. Protecting the interests of the utilities and the ratepayers, who ultimately pay for such plant enhancements, is our primary objective. We are the eyes and ears of the Commission.

We are made up of highly specialized professionals with extensive credentials. As a team, CTC personnel have worked together on numerous projects over the past 30 years as you will see in our proposal. We have participated in over one hundred independent monitoring and prudency reviews. Recently, CTC independently assisted the Georgia Public Service Commission Utility Staff by conducting prudence and monitoring activities including oral and written testimonies during the design, engineering, and construction of the Vogtle Nuclear Power Plant Units 3 and 4.

Our expertise and experience working with a variety of clients and our extensive Independent Consulting, Engineering/Procurement, Construction Oversight and Management, and Operations and Maintenance experience with numerous energy projects.

CTC has used this expertise and experience to develop approaches to perform the engineering monitoring services which will result in the best price for the ratepayers of Louisiana. During the execution of this work scope, CTC has two primary objectives. The first objective is to ensure the costs are minimized and are prudent, reasonable, and fair to the ratepayers of Louisiana; while the second objective is to see that ELL is successful in the development and implementation of the work scope of their Uprate Plan. These two objectives are critical to the overall enhancement of the safe, reliable, and delivery of power for a better lifestyle for the citizens of Louisiana.



CTC is prepared to perform the scope of Services as shown in RFP 25-09 for the cost of \$ 166,430 and expenses of \$4,000. (\$170,430)

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

Sincerely,

Ben Hill, President Critical Technologies Consulting, LLC.



Innovative Ideas for Shaping the Future

Independent Engineering & Consulting in Engineering, Procurement, Construction, Operations & Maintenance, Due Diligence, and Risk Management



Critical Technologies Consulting, LLC

2238 S. DUVAL MESA, AZ. 85209 859-533-2367 MAIN OFFICE 2 HOPKINSON COURT MARLBORO, NJ. 07746 (P) 732-209-1147

13130 TEMPLET RD ST AMANT, LA. 70774 (P) 225-329-7293 26 WYNNEWOOD RD. WELLESLEY, MA. 02481 (P) 617-470-0656



PROPOSAL

EXECUTIVE SUMMARY

ELL filed an application seeking Commission approval to complete an uprate project at the Waterford 3 nuclear station and for associated cost recovery in accordance with the Commission's General Order dated September 20, 1983 ("1983 GO"). Waterford 3 is a nuclear plant that currently has a net electrical output of approximately 1,150 MW, began commercial operation in 1985, and is licensed by the Nuclear Regulatory Commission to operate until December 18, 2044. The Company's application is seeking to increase the electrical output of Waterford 3 by approximately 45 MWe.

The Company also seeks Commission approval that the costs associated with the uprate project are eligible for recovery through the Additional Capacity Mechanism ("ACM") within ELL's Formula Rate Plan ("FRP"), with express authorization of such treatment even if the project's first-year non-fuel, retail revenue requirement is below \$10 million.

CTC Staff have reviewed the entire filing for more information on ELL's Uprate application request, paying particular attention to the pre-filed direct testimony's of Laura Beauchamp, Jason Willis, Patrick Sullivan, and Daniel Boratko.

CTC will be assisting the Commission's in-house Staff (Legal, Utilities, and Auditing Divisions) in reviewing ELL's request and providing a recommendation to the Commission.

We have included in this proposal a Scope of Representation, including a proposed approach with an Action Plan, to support the Commission Staff in this matter. We also include the experience and qualifications of our team, a preliminary list of deliverables, our proposed rate schedule in an hourly basis, and a total budget separating professional fees from direct costs, based on the scope of work and estimated period of representation for the assignment.

During the execution of this work scope, CTC has two primary objectives.

The first objective is to ensure the Uprate Modifications costs are optimized and are prudent, reasonable, and fair to the ratepayers of Louisiana; while the second objective is to ensure ELL is successful in the development and implementation of the work scope of their Uprate Plan. These two objectives are critical to the overall enhancement of the safe, reliable, and increased capability to add output power for a better lifestyle for the citizens of Louisiana.



CTC brings to the Staff a team of highly experienced personnel with the necessary technical, utility, and regulatory expertise and backgrounds in project development, project evaluations, issuance of RFPs, and their implementation to provide real value to the Commission while protecting the interests of the ratepayers. CTC has on staff licensed engineers.

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 25-09 for the cost of \$166,430 and expenses of \$4,000. (Total \$170,430)

INTRODUCTION

Critical Technologies Consulting (CTC) is pleased to submit its proposal to the Louisiana Public Service Commission as independent engineering consultants to assist Commission Staff in its monitoring and review of ELL's application to perform Uprate modifications at the Waterford 3 Nuclear Power Station.

SCOPE OF REPRESENTATION

CTC has reviewed and familiarized itself with RFP 25-09 and the testimonies and reports included in the filing of ELL under Docket No. U-37677 before submitting this bid proposal in response to RFP 25-09.

In assisting Staff, CTC will review the application (including the direct testimony of four witnesses, any supporting documentation, and associated cost models); draft data requests and review responses thereto; potentially participate in informal meetings with Staff and ELL, Staff and Intervenors, or Staff, ELL, and Intervenors; assist in drafting a recommendation(s), including testimony, to the Commission regarding ELL's request on implementing the Waterford 3 Power Uprate modification; 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 and motions related thereto; and review and analyze potential stipulation terms. CTC assumes this matter will result in a contested proceeding.



Additionally, CTC shall be available to participate in meetings, conference calls, status conferences, hearings, and other conferences with the Commission and its Staff, as well as attending any Business and Executive Session(s) that Staff deems necessary.

In addition, ELL's request includes proposed remote monitoring and reporting of periodic modification reports submitted by ELL.

The scope of work provided herein shall continue through the conclusion of the docket, including Commission consideration of the request at a B&E, or B&Es.

As shown in this proposal, CTC has a professional firm resume with the qualifications and experience necessary to meet the requirements of this RFP.

PERIOD OF REPRESENTATION

As shown in the RFP, the time period estimated to complete the Scope of Representation is approximately 8 to 10 months. However, as shown in ELL's Jason Willis testimony, the work is to be accomplished during the Fall of 2026 outage, which is currently set for October 18, 2026 through November 14, 2026. Additionally, the last component (the High Pressure Turbine Inner Casing) is scheduled for replacement in the 2029 outage, which will conclude the Uprate project. CTC's schedule and cost estimate includes these durations.

PROPOSED APPROACH AND PLAN OF ACTION

The Proposed Plan of Action for CTC 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 25-09.

Note:

CTC has reviewed all the attachments to the Application and some are redacted on matters considered confidential by ELL. CTC needs to review the full Application with Attachments and Testimony attached thereto, and therefore requests that upon selection, these confidential documents be made available to CTC for its full review. CTC has signed Confidentiality Agreements and NDAs with ELL and the Commission in the past and will be pleased to sign such documents for this assignment specifically.



List of Tasks:

- 1. Upon authorization to proceed, CTC consultants will proceed to review all the documentation available covered by Docket No. U-37677. This documentation should include pre-modification general design standards; equipment specifications for components selected for repair, enhancement, or replacement; and the schedule for the implementation of the Uprate Plan including general cost estimates. An agenda will be formulated to meet, discuss, and agree with the Commission Staff including a list of requests for information (RFIs) both to be transmitted to ELL prior to the Kick-off session described in Task 2.
- 2. CTC shall call for a pre-kick-off session with the Staff and then jointly with ELL to review the work to be accomplished and the associated timelines. Then the Kick-off Session would be held with CTC, Staff, and ELL personnel and their consultants concerning the items and issues to be covered in CTC's Scope of Representation. This Task also includes discussions and agreements on the various interfaces in terms of communications, RFIs, and ELL responses.
- 3. In assisting Staff, CTC will review the application (including the direct testimony of ELL witnesses, any supporting documentation, and associated schedule and cost models).
- 4. CTC will draft data requests and review responses thereto.
- 5. CTC will potentially participate in informal meetings with Staff and ELL, Staff and Intervenors, or Staff, ELL, and Intervenors.
- 6. CTC will assist in drafting a recommendation(s), including testimony, to the Commission regarding ELL's request to implement the Waterford 3 Uprate Plan.
- 7. CTC will as requested by Staff review and respond to any rebuttal testimony and assist in preparing any necessary direct and cross-answering testimony.
- 8. CTC will assist as requested by Staff in trial preparation, including cross-examination of witnesses and drafting pleadings and motions related thereto.
- 9. CTC will review and analyze as requested by Staff potential stipulation terms. CTC is assuming this matter will result in a contested proceeding.
- 10. Additionally, CTC shall be available to participate in meetings, conference calls, status conferences, hearings, and other conferences with the Commission and its Staff, as well as attending any Business and Executive Session(s) that Staff deems necessary.
- 11. CTC Scope of Representation assumes that should the Commission authorize the Company to complete the uprate project, that the Commission will also want monitoring of ELL during the uprate process. While ultimately up to the Commission, in this Task, CTC includes reviewing and analyzing quarterly



project monitoring reports and submitting data requests for any follow-up information that may be necessary. Commission Staff does not anticipate the need for site visits during any approved monitoring phase and therefore does not need to be included in CTC's proposed scope of work or proposed budget.

Additionally, CTC personnel shall be available to participate in meetings, conference calls, status conferences, hearings, and other conferences with the Commission and its Staff, as well as attending any Business and Executive Session(s) that Staff deems necessary.

The scope of work provided herein shall continue through the conclusion of the docket, including Commission consideration of the request at a B&E, or B&Es.

CTC understands that the Commission and its Staff reserve the right to determine how tasks under this RFP will be carried out, including setting internal deadlines to ensure the proceeding moves along in an orderly fashion.

It must be noted that neither CTC nor its personnel use ChatGBT or any other AI type platform when performing scope of services contained herein.

DELIVERABLE PRODUCTS

CTC will develop presentation reports and documentation as requested by Staff. In addition, CTC will issue a monthly progress report in PowerPoint format 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 Commission 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.

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 nor any of the entities subject to the Louisiana Public Service Commission (LPSC) regulatory responsibilities.



CTC personnel have worked for other state public service commission Staffs, ISOs, IPPs, regulatory bodies, utilities, electric coops, municipalities, investors, lenders, 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 recently represented the Louisiana Public Service Commission and the Public Utility Commission of New Orleans in the evaluation of the prudence of the decisions by Entergy during the operations and outages at the Grand Gulf Nuclear facility. A detailed report of technical deficiencies at Grand Gulf as well as a detailed Prudence review were performed.

CTC RESUME AND GENERAL NUCLEAR QUALIFICATIONS

The CTC team has the requisite knowledge of the topics involving this Docket and discussed in RFP 25-09, 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 No. U-37479.

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.

Each of our personnel has extensive years of nuclear power experience in the proper planning, Engineering, Procurement, Fabrication of Components and Modules, Construction, Start-up, Commissioning, Monitoring, Maintenance of nuclear power plants and major Uprates to older plants. Our Consultants average a minimum of 40 years in the Power industry, with the majority of that experience directly involved with nuclear power plant designs, installations, operations, and commissions.

The following are recent CTC projects, which reflect our understanding of the nuclear power plant industry and sets us apart from the other companies performing nuclear power plant services.



Vogtle Unit 3 and 4 Nuclear Power Plant



Vogtle Monitoring Group (VMG), subsidiary of Critical **Technologies** Consulting, LLC was retained by the Georgia Public Service Commission Staff as an Independent Monitor and is responsible for providing onsite monitoring, status reviews, financial, cost, and schedule reviews, quality reviews, and all other aspects of project development and completion. These responsibilities are accomplished through an on-site presence as well as detailed

reviews of site-generated status reports on progress and financial expenditures. VMG offers "independent" conclusions and forecasts relative to technical completion as well as forecasted expenditures and cost growth. One of our primary functions is to ensure the project's progress coincides with the financial disbursements. VMG is also responsible for providing prudence reviews and offering written and oral expert witness testimony at six (6) month intervals during the established Commission Hearings.

Reference Docket No. 29849

V.C. Summer Nuclear Power Plant



The V.C. Summer Nuclear Power Plant consists of an AP1000, Westinghouse design. The Project was subject to numerous mismanagement failures and fraud resulting in the shutdown of the project. CTC was engaged recently to perform a detailed prudence review related to the failures of the Project with a specific focus on the schedule, project management, and execution of the project. A detailed analysis was performed of the project schedule and the contributing factors leading up to

the closure of the plant construction activities. This case was recently settled out of court based on recommendations of CTC in their final reports and deposition.

St Lucie and Turkey Point Nuclear Power Plant Uprates



CTC personnel previously performed a detailed evaluation of the Uprates performed at the St Lucie and Turkey Point Nuclear Power Plants in Florida. This assignment was for

Florida Power and Light and consisted of a detailed analysis of the work performed during the major Uprate modifications to determine the revised design was viable and the appropriate equipment and components were included to optimize the additional output. Major



decisions were also reviewed for prudency. Written and oral testimony were presented to the Florida Public Service Commission and all recommendations by CTC personnel were accepted and ordered by the Commission.

Grand Gulf Nuclear Power Plant



The Grand Gulf Nuclear Power Plant ("GG") consists of a General Electric Manufactured Boiling Water Reactor with a capacity output of 1,443MW, making it the largest commercial nuclear power plant in the United States. GG, located in Port Gibson, Mississippi provides approximately 33% of its power to the State of Arkansas. Recently, GG experienced a forced outage requiring the plant to be out of service for approximately five months. The Arkansas Attorney General has engaged CTC to perform

a due diligence review of the outage and subsequent causes and provide an opinion on the prudence of requiring the ratepayers of the State of Arkansas to absorb this cost through rates. CTC is working closely with the Attorney General's office and plans to provide written as well as oral testimony as this is an ongoing assignment.

Reference Docket No. 15-015-U



Arkansas Nuclear One Power Plant (ANO)



The ANO site consists of two pressurized water nuclear-powered electrical generating plants; Unit 1 (a Babcock and Wilcox Nuclear Plant, rated at 836 MW) and Unit 2 (a Combustion Engineering Nuclear Plant, rated a 993 MW).

In March 2013 a serious accident (referred to as the "Dropped Stator Incident") occurred at ANO that resulted in loss of life and additional serious personnel injuries. This incident, plus a series of NRC reportable events, led to ANO being

categorized as a Category IV power station. Category IV is next to the least favorable category (i.e., Category V, and with that rating would require plant shutdown). In addition, ANO's operational performance has not been up to par.

The Arkansas Attorney General's Office (ARK-AG), in representing the public's interests, has engaged CTC to review and report on ANO's performance. To this end, CTC has performed analyses and prepared written testimony that has been submitted to the Arkansas Public Service Commission. Also, CTC will support the ARK-AG at future hearings by providing oral testimony. Included with CTC's written testimony is an analysis and definitive evidence as to why ANO's performance should be evaluated as degraded, and further actions that need to be taken to further evaluate issues of prudency.

Reference Docket No. 16-036-FR

CTC has extensive knowledge and understanding of the pitfalls and challenges the Owners and Contractors had at both the Vogtle and V.C. Summer nuclear projects as well as others shown above. We are prepared to implement many of the "Lessons Learned" for nuclear projects, specifically the Waterford 3 Uprate Project to support ELL and the Louisiana Public Service Commission in the permitting, engineering, procurement, and construction monitoring with a focus on protecting the Louisiana Ratepayers.

CTC has a history of protecting not only Utilities, Public Service Commissioners, and Regulatory Agencies, but also their constituents, the State's Ratepayers and Citizens. We have the experience and the track record to protect the interests not only of the ratepayers but also to assure compliance with regulated Orders in protecting the interests of the Public Service Commissioners and Staff of various States.

As you can see, CTC has the experience and expertise to provide the quality service needed and required by the Louisiana Public Service Commission.



Key personnel among the CTC personnel have substantive experience in the methodology of the project development of various nuclear and uprate energy project sources.

CTC personnel are qualified and prepared to render expert testimony and be cross-examined with respect to all of the issues in RFP-25-09 and which are likely to arise in the proceeding and be qualified and prepared to render testimony at a hearing and/or a B&E regarding the same and have knowledge of:

- The Commission's Rules and Orders pertaining to the acquisition of power supply resources, including but not limited to the Commission's 1983 GO.
- A detailed understanding of the major functional areas of a regulated investorowned electric utility.
- Appropriate accounting standards and practices for electric public utilities, public utility accounting, and generally accepted auditing standards.
- Whether or not a resource/uprate will provide reliable service at the lowest reasonable costs.
- Resource planning methods to improve the efficiency of a utility's power supply operations and whether the utility is making use of such methods.
- Familiarity with just and reasonable costs and prudent investments associated with providing reliable and quality service as recommended by NARUC.
- Public interest criteria for approval of resources and purchase power contracts.
- The basic components and requirements of ELL's Formula Rate Plan, including cost of capital, capital structure, cost of debt, cost of equity, and rates of return, as well as currently approved riders.

OTHER RECENT ASSIGNMENTS

Client	Description	Location		
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)	Technical reviews/reports/testimony related to the Grand Gulf Nuclear Power Plant imprudence case before FERC.	Grand Gulf Nuclear Power Plant Louisiana		
Denton (representing CNO)		City of New Orleans		



Client	Description	Location Kemper Project Meridian, MS			
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.				
West Virginia Public Service Commission	plic Service coal power plants related to disregard of direction from the				
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	-				
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 prudency 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					
AEI Energy	115 MW Wind Farm (50 Units)				
El Arrayan	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.				



Client	Description	Vogtle Nuclear Power Plant Units 3&4 (New Construction) Red-Butte, Utah Mass to Vermont			
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.				
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.				
X24, 69kV Transmission and Distribution Reconductoring & 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.				
AEI Energy and Lenders Jaguar Energy Guatemala	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			
City Public Service	4 LM6000 Combined Cycle units. Owner Engineer.	Texas			
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.				
Department of Energy					
Department of Energy	Complete Cost Estimate – Title I, Engineering Phase for the Accelerator Production of Tritium (APT) Project.	Los Alamos, NM Aiken, SC			



Client	Description	Location		
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 \$170.00/hour to \$450.00/hour, however, we have discounted our fees for the commission such that they range from \$140.00/hour to \$280.00/hour as shown below:

Rate Schedule for 2025:

Position	Standard Rate	Discounted Rate For RFP-25-09
Senior Executive Consultant	\$450	\$280
Executive Consultant	\$415	\$275
Senior Consultant	\$325	\$220
Consultant	\$235	\$200
Construction Consultant	\$265	\$220
Senior Specialist	\$280	\$230
Specialist	\$250	\$195
Research and Management	\$195	\$165
Analyst	\$170	\$140
Expenses	Actual Cost	Actual Cost

For this assignment, CTC has developed a cost estimate of \$166,430 for the scope of services to be provided. We have included expenses of \$4,000. Total assignment cost not to exceed \$170,430.

CONCLUSIONS

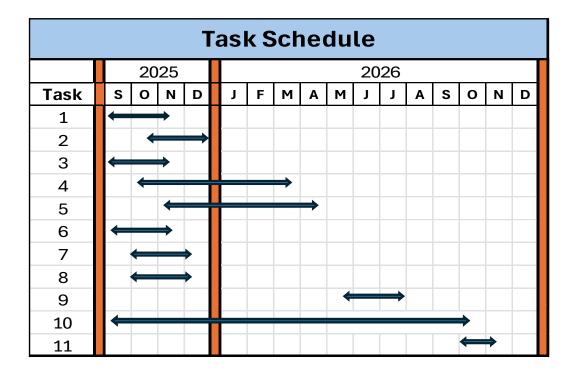
The CTC team has been involved in nuclear power plants from the 1970s to date and believes that it is well qualified to provide the Staff with the independent engineering expertise, innovation, codes and standards knowledge, utility knowledge, resource planning, and project management knowledge needed to assist Staff in completing all necessary reviews and data related to the Scope of Representation presented in RFP-25-09.



CTC key team members are experienced in participating in cases involving public utility regulation, including the presentation of direct testimony and cross examinations, 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 and monitoring the performance of ELL in implementing the Waterford 3 Nuclear Uprate Modification Plan. 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 monitoring services.

PROPOSED SCHEDULE - BY TASK





APPENDIX A

Detailed Breakdown of Costs

	Senior /Executive		Specialist		Construction & Technical		Research & Management					
		Average		Average		Average		Average				
Task	HRS	Rate	Total	HRS	Rate	Total	HRS	Rate	Total	HRS	Rate	Total
1	120	\$280	\$33,600	0	\$205	\$0	10	\$220	\$2,200	0	\$165	\$0
2	40	\$280	\$11,200	0	\$205	\$0	0	\$220	\$0	0	\$165	\$0
3	60	\$280	\$16,800	0	\$205	\$0	0	\$220	\$0	0	\$165	\$0
4	100	\$280	\$28,000	10	\$205	\$2,050	10	\$220	\$2,200	30	\$165	\$4,950
5	10	\$280	\$2,800	0	\$205	\$0	0	\$220	\$0	0	\$165	\$0
6	20	\$280	\$5,600	0	\$205	\$0	0	\$220	\$0	0	\$165	\$0
7	10	\$280	\$2,800	0	\$205	\$0	0	\$220	\$0	0	\$165	\$0
8	10	\$280	\$2,800	0	\$205	\$0	0	\$220	\$0	0	\$165	\$0
9	16	\$280	\$4,480	0	\$205	\$0	0	\$220	\$0	0	\$165	\$0
10	30	\$280	\$8,400	0	\$205	\$0	10	\$220	\$2,200	0	\$165	\$0
11	100	\$280	\$28,000	30	\$205	\$6,150	10	\$220	\$2,200	0	\$165	\$0
	516		\$144,480	40		\$8,200	40		\$8,800	30		\$4,950
Total all Task Work					\$166,430							
Expenses =Potential B&E Meetings (4) Trips at \$1000/Trip = \$4,000					\$4,000							
TOTAL ESTIMATED COST					\$170,430							

APPENDIX B



(Where BIOs are shown, Resumes have been sent previously or are known by the LPSC)



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 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 prudency of performance. Also performed acquisition due-diligence studies.

ALBERT FERRER - BIO

Executive V P – Independent Engineering & Consulting / Senior Executive Consultant and 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.



SAM PETROSI - BIO

Chief Nuclear Engineer, PE



P.E. Chief Nuclear Engineer

Over 40 years of experience with increasing responsibility in the field of nuclear engineering including design, licensing, project management, construction, and testing. He has held positions as Chief Nuclear Officer, Chief Nuclear Engineer, Design Engineering Manager, Engineering Consultant and Project Manager at Architect/Engineer and Consulting firms and Engineering Manager, Engineering Supervisor and Project Engineer at Electric Utilities. His career spans new nuclear plant design and operating nuclear plants support.

Mr. Petrosi holds a B.S in Nuclear Engineering from Rensselaer Polytechnic Institute and a Professional Engineer's License in the state of New Jersey.

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.



REGINALD S. GAGLIARDO - PE - BIO

Executive Consultant

Reg Gagliardo, VP - Consulting, P.E.



Over 40 years of extensive technical and project management experience in providing services for nuclear and non-nuclear power generating stations, industrial plants, and DOE facilities. This experience includes senior-level positions for the leadership, direction, and development of the engineering, procurement, construction support, project controls, quality assurance, and information technology divisions. Expertise includes management, planning, and execution of projects; project scope, budget, and schedule development, monitoring,

and maintenance; project performance turn-around; assurance of work quality; assessment, training, and development of personnel; preparation and improvement of work processes, standards, and procedures; and business strategy and development initiatives. During his career, he has served in as a senior management representative on several LLCs and in industry groups. He is a Life Senior Member of the Institute of Electrical and Electronics Engineers and a Member of the American Nuclear Society.

CHRISTOPHER HILL - BIO

Senior Specialist



Business and Information Technology Executive with 26 years of experience in multiple industries. ExcClecoent 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 independent construction monitoring service and

consulting firm.

- 24 years of experience in Information Technology Management in various industries: Industrial Construction, Aviation, Mill/Manufacturing, and bigbox 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.

ROSALIE MANNARINO - BIO

Research and Management



Rosalie Mannarino, CPA

As a Certified Public Accountant, she has counseled Clients in various industries with a focus on implementing Financial Management and Controls Development Strategies in the power industry. She has been part of CTC's successful team in the support of detailed analysis, modeling, and reporting actual cost associated with capital expenditures on major projects in which CTC is under Contract. Her years at *PricewaterhouseCooper LLP*, *New York*, *NY* coupled with her Power industry experience enables her as a unique asset to CTC

in the Nuclear Power arena.