



INCORPORATED COUNTY OF LOS ALAMOS SERVICES AGREEMENT

This **SERVICES AGREEMENT** ("Agreement") is entered into by and between the **Incorporated County of Los Alamos**, an incorporated county of the State of New Mexico ("County"), and **FTI Consulting**, a Maryland corporation ("Contractor"), collectively "Parties", to be effective for all purposes June 30, 2021 ("Effective Date").

WHEREAS, County, through its Department of Public Utilities ("DPU"), owns and operates both electrical power generating facilities and electrical distribution systems within and outside its jurisdictional borders; and

WHEREAS, County, through DPU, has entered in certain federal agreements with the U.S. Department of Energy, National Nuclear Security Administration, to provide electrical power to the Los Alamos National Laboratory ("LANL"); and

WHEREAS, the current agreement, commonly referred to and as known as the "Electrical Cooperative Agreement" ("ECA"), provides for certain shared electrical generation and distribution costs between County and LANL; and

WHEREAS, the ECA allocates, among other matters, the responsibilities of the County and LANL for ownership, operation, and maintenance of the generating facilities and certain long-term power purchase agreements; and

WHEREAS, in a fast changing electric market, it is a prudent utility practice to regularly review resources and pricing, and current and proposed electrical generating facility capabilities and pricing; and

WHEREAS, the County Purchasing Officer determined in writing that the use of competitive sealed bidding was either not practical or not advantageous to County for procurement of the Services and County issued Request for Proposals No. 21-41 ("RFP") on February 25, 2021, requesting proposals for Development of an Integrated Resource Plan to guide the Department of Public Utilities ("DPU") in the acquisition of new power generation resources, as described in the RFP; and

WHEREAS, Contractor timely responded to the RFP by submitting a response dated March 28, 2021 ("Contractor's Response"); and

WHEREAS, based on the evaluation factors set out in the RFP, Contractor was the successful Offeror for the services listed in the RFP; and

WHEREAS, the Board of Public Utilities approved this Agreement at a public meeting held on June 16, 2021; and

WHEREAS, the County Council approved this Agreement at a public meeting held on June 29, 2021; and

WHEREAS, Contractor shall provide the Services, as described below, to County.

NOW, THEREFORE, for and in consideration of the premises and the covenants contained herein, County and Contractor agree as follows:

SECTION A. SERVICES: Contractor shall prepare and provide to DPU an Integrated Resource Plan (“IRP”)(hereafter “Project”) that:

1. Guides County’s and DPU’s near-term decisions associated with the California Independent System Operator (“CAISO”) Energy Imbalance Market (“EIM”) and having adequate generation resources and or long-term Power Purchase Agreements (“PPAs”).
2. Guides County’s and DPU’s near-term and long-term decisions in multiple areas as DPU implements the policies adopted by County’s Board of Public Utilities (“BPU”) while considering the requirements of the Department of Energy (“DOE”), National Nuclear Security Administration (“NNSA”) and LANL.
3. Is formatted so that it can be easily updated by County or its agent(s) over time to reflect changing circumstances.
4. Evaluates a comprehensive range of demand-side and supply-side resources over calendar years 2021 to 2040.
5. Address the following key questions:
 - a. How can DPU and DOE-LANL best share resources for the benefit of both parties in a post-2025 ECA?
 - b. What is the best portfolio of resources to meet DPU’s goal of being carbon neutral (as defined by the Los Alamos Board of Public Utilities) by 2040?
 - c. Recommendation whether DPU should continue its participation in the Utah Associated Municipal Power Systems (“UAMPS”) Carbon Free Power Project (“CFPP”) using a series of small modular reactors, specifically considering the expansion of the CAISO EIM?
 - d. What additional opportunities exist for cost-effective demand-side programs, including energy efficiency, demand response, and distributed energy storage?
 - e. How can DPU cost-effectively meet the requirements for reliable and economic operations inside the Balancing Area of the Public Service Company of New Mexico (“PNM”) considering their participation in the CAISO EIM beginning the second quarter of 2021?
 - f. How would the projected load forecast effects from electrification of the transportation sector and behind-the-meter distributed generation impact the resource plan?
 - g. What reserve margin should Los Alamos Power Pool (“LAPP”) and DPU maintain separately in consideration of factors, including but not limited to the liquidity in the market, CAISO Duck Curve¹ pricing and renewable overgeneration, upcoming changes in the Western Electricity Coordinating Council (“WECC”) market, the August 2020 heatwave, and the recent electrical system (a.k.a. grid) reliability event in Texas?

¹ The duck curve is a graph of power production over the course of a day that shows the timing imbalance between peak demand and renewable energy production. Used in utility-scale electricity generation, the term was coined in 2012 by Karen Edson of the California Independent System Operator.

- h. What are the optimal strategies related to the Laramie River Station (“LRS”) contract? LRS is currently one of the least-cost resources and the policy adopted by the Board is to exit the LRS project when economical.
6. Contractor shall complete the Project in five (5) phases. These are:
- a. **Phase 1: Initiation of the IRP Effort.** Contractor shall perform the following work as part of Phase 1:
 - 1. Project Kick-Off Meeting. Contractor shall, within fourteen (14) days from the Effective Date of this Agreement, conduct a kick-off meeting with DPU and DOE-LANL (at DPU's discretion) to align Project management protocols, understand objectives, timelines, technical approach, assumptions, and inputs. During the Kick-Off meeting, the Parties shall mutually agree on project schedule (“Project Schedule”) in substantial conformance with the Project Schedule and Project milestones found in Contractor's proposal. The Parties may mutually agree, in writing, to modify the Project Schedule as necessary to timely complete the Project.
 - a. Conduct team introduction and define roles, agree on weekly project management meetings and protocols. During the Kick-Off Meeting, the Parties shall designate each Parties' Project lead contact and manager (hereafter respectively “Project Manager”). The Contractor shall schedule weekly communications and Project management meetings throughout the Project. The goal of these meetings is to provide progress updates, review work performed to date, clear away any hurdles or obstacles, align the technical approach, and incorporate any new information that may become available. Contractor shall communicate pursuant to the Project Schedule with DPU's Project Manager and team to ensure that DPU is fully appraised of the Project's progress and has input into all steps of the analysis. As part of the Project Management, Contractor shall implement necessary quality controls throughout the IRP process.
 - b. Establish key milestone deliverables to ensure on-time and on-budget completion of the IRP. During the Kick-Off meeting, Contractor shall discuss and establish with DPU key milestone dates that are synced with DPU's planning activities and the County's Board of Public Utilities (“BPU”) meetings. The Project Schedule shall provide time for Contractor's internal quality control reviews and DPU's review to ensure that the work meets the DPU's requirements.
 - 2. Gather input data. Before the kick-off meeting, Contractor shall submit a data request to DPU's Project Manager to collect needed information including DPU and LAPP existing generation resources technical characteristics, power and fuel purchase contracts, the current ECA between DPU and LANL, documentation of any proposed post-2025 ECA options through which the DPU and LANL could combine the generation resources and share the costs within the LAPP, energy efficiency programs, electric vehicle programs, demand response programs, EIM participation agreements, LANL Executive Orders related to energy goals and renewables development, and any other relevant documents that Contractor needs to include in performing the Project.
 - 3. Develop key modeling assumptions. Contractor shall provide DPU the assumptions, approach, and data sources used to produce gas, coal, and CO₂ price forecasts,

capital cost forecasts for key generation technologies (solar, wind, battery storage, gas combined cycle, combustion turbine, reciprocating engines, etc.).

4. Develop objectives and metrics of the IRP. Contractor shall develop consistent key metrics which shall be used to evaluate the merits of each portfolio in Phase 4 and Phase 5, including economic metrics, which identify portfolios with the least cost net present value ("NPV") over the IRP horizon; risk metrics, which measure DPU's market exposure and ability to offer stable rates to customers; reliability and resiliency metrics, which reflect DPU's ability to reliably serve load; and sustainability metrics, which reflect progress towards the carbon neutral goal, renewable penetration, and CO² emissions reduction.
5. Discuss IRP technical approach and process. During the kickoff meeting, Contractor shall present the technical approach and processes Contractor will follow in conducting Phases 2 through 5, and to address the core questions of DPU's IRP stated in Section A, item 4 of the Agreement. DPU and LANL will provide input and ask clarifying questions, and Contractor shall consider modifications to the approach and process.
6. After the completion of Phase 1, Contractor shall deliver to DPU the PowerPoint presentation on the technical approach and processes that shall be used in the development of the IRP and a summary memo of the Kick-Off meeting key discussion items. DPU shall review the memo and approve as complete or negotiate modifications with Contractor prior to proceeding to Phase 2.

b. Phase 2: Initial Screening of post-2025 ECA Options.

1. Contractor shall hold a meeting with DPU and LANL, pursuant to the Project Schedule, to discuss DPU's and LANL's plans related to existing and planned new resources, and the goals and objectives of both Parties moving forward.
2. Using the information from the meeting with DPU and LANL, Contractor shall construct several portfolios (a portfolio is a collection of generation resources to meet load) based on inputs from DPU and LANL as part of Phase 3, Step 4.
3. Contractor shall include in the final IRP post-2025 options for DPU and LANL meeting DPU's and LANL's separate objectives.
4. Contractor shall deliver a list of resource options to the County Project Manager for acceptance.
5. Contractor shall deliver to DPU, pursuant to the Project Schedule, a summary memo documenting DPU's and LANL's stated Project goals and objectives, and their plans for the 20-year planning horizon. DPU shall review the memo and approve as complete or request modifications with Contractor prior to proceeding to Phase 3.

c. Phase 3: Integration of post-2025 ECA Options into the IRP. Contractor shall undertake the following five steps as part of Phase 3 of the Project:

Step 1: Develop analytical model parameters.

Contractor shall develop a baseline of analytical model parameters which shall be used to perform the deterministic and stochastic analyses performed later in Phase 3, Steps 2 through 5. Pursuant to the Contractor's proposal, Contractor shall include in the baseline the following parameters:

1. WECC EIM Considerations. Contractor shall evaluate the availability of real-time market purchases and bilateral trading, how the CAISO market's timing imbalance between peak demand and renewable energy production ("Duck Curve") impacts the

requirements for new resources, and how operating in the EIM affects the Day-Ahead and real-time prices in the regional market that directly impacts DPU's cost of serving its load, and DPU's ability to balance resource and load in real time.

2. Planning Reserve Margin. Contractor shall evaluate planning reserve margin requirements based on the generation resources selected for each portfolio, best practices of utilities in the same market footprint, extra resources necessary to account for peak loads that are higher than forecasted, unplanned outages of generation and transmission resources, and the flexibility to balance short-term and multi-hour ramps in net load and to manage potential over-generation.
3. Fuel Forecast.
 - a. Contractor shall provide fuel forecast prices for natural gas at the Henry Hub and southwest regional delivery points, price forecasts for base, high, and low scenarios based on FTI's proprietary stochastic forecast model.
 - b. Contractor shall provide fuel forecast prices for coal (including transportation) price forecasts for base, high, and low scenarios based on FTI's integrated coal and electricity market model.
4. Emission Rates and CO² Price Forecasts.
 - a. Emission rates of CO², SO², and NO_x for owned and potential generation resources.
 - b. CO² price forecasts for base, high, and low scenarios, considering differing scenarios of environmental legislation, market design, and market forces affecting the cost of compliance.
5. Technology Capital Costs Curves Forecast, including:
 - a. Capital costs and operating cost curves for onshore wind, solar, utility scale battery storage (lithium-ion battery, flow battery), nuclear, gas with carbon capture utilization and storage ("CCUS"), gas combined cycle, and gas combustion turbine technologies.
 - b. Federal and state Investment Tax Credits and Production Tax Credits.
6. Power Market Forecast including:
 - a. Power price forecasts in WECC (peak, off-peak, and around-the-clock prices).
 - b. Generation resources retirements and builds.
7. Resource Assumptions including:
 - a. Existing and planned resources characteristics (summer and winter capacity, heat rate and efficiency assumptions, fixed operating costs, variable operating costs, options to exit, planned retirement, etc.).
 - b. Renewable resources generation profiles.
 - c. DPU and LANL power purchase agreements with third parties' terms and assumptions.
8. Load Forecast developed through the following process steps:
 - a. Collect DPU's and LANL's historical load, local weather and economic data (GDP, income, population, vehicle counts).
 - b. Update Contractor's existing regression model with recent weather and economic factors to load.
 - c. Project future weather conditions in Los Alamos County and economic variables based on updated historical indicators and emerging trends.

- d. Develop an electric vehicle forecast for Los Alamos County based on an adoption curve and benchmark electricity consumption per mile.
 - e. Complete baseline load forecast for peak demand (MW) and energy consumption (MWh).
 - f. Develop load forecast scenarios with higher or lower macroeconomic growth parameters.
9. Contractor shall deliver to DPU an Excel workbook and summary memo of baseline forecasts and inputs (analytical model parameters). DPU shall review the memo and approve as complete or negotiate modifications with Contractor prior to proceeding to Phase 3, Step 2.

Step 2: Develop Scenarios and Options

1. Contractor shall develop three scenarios which apply three sets of values for the analytical model parameters: base, high and low cases, pursuant to the Contractor's proposal. The scenarios shall be used later in Phase 3, Step 4 to conduct scenario-based deterministic portfolio analysis.
 - a. Contractor shall determine the supply-side resources that shall be considered as part of DPU's portfolios, and seek DPU's inputs, review, and approval of Contractor's selected supply-side resources.
 - b. Contractor shall evaluate the demand-side resources that shall be considered as part of DPU's portfolios, and seek DPU's input, review, and approval of Contractor's selected demands-side resources.
2. Contractor shall deliver to DPU an Excel workbook and a summary memo of the three scenarios, the associated analytical model parameter values for those scenarios, a list of resources that shall be considered in Phase 3, Step 3. DPU shall review the memo and approve as complete or negotiate modifications with Contractor prior to proceeding to Phase 3, Step 3.

Step 3: Technology Options Screening

1. Contractor shall evaluate generation resources as potential additions to the DPU's system based on characteristics including environmental performance, level of deployment, location, any related interconnection difficulty, dispatchability, and levelized cost of energy ("LCOE"). As part of the screening analysis, Contractor shall assess LCOEs based on cost and performance assumptions including capital expenditures, operations and maintenance costs, capacity factor, financing assumptions, and delivered fuel costs.
2. This step is intended to develop LCOEs for candidate resources so that the high performing resources will later be included as candidate in Phase 3, Step 4.
3. Contractor shall deliver to DPU a summary memo of technology screening of all viable resource options under the three scenarios based on performance measures such as levelized cost of energy, environmental attributes, and load following capabilities. DPU shall review the memo and approve as complete or negotiate modifications with Contractor prior to proceeding to Phase 3, Step 4.

Step 4: Portfolio Construction

Based on the results of Phase 3, Steps 1-3, Contractor shall construct feasible candidate portfolios through the following process steps.

1. Contractor shall develop candidate portfolios that match generation to load and consider the goals and objectives and other parameters developed in the previous steps.
2. Contractor shall present the candidate portfolios to DPU for discussion and approval.

3. Contractor shall build an analytical model of DPU's and LANL's system which includes factors such as load profiles, generation resources characteristics, renewable profiles, and transmission needs.
4. Contractor shall use the model to perform deterministic analyses to generate economic, environmental, and reliability performance assessments of each of the candidate portfolios using the three scenarios established in Phase 3, Step 2.
5. Based on the economic, environmental, and reliability performance assessments from the deterministic analyses, Contractor shall select up to ten (10) portfolio candidates for the stochastic analyses to be performed in Phase 3, Step 5.
6. Contractor shall present to DPU for discussion and approval the results of the deterministic analyses, the basis and rationale for selection of the portfolio candidates and finalize a list of portfolios for stochastic analysis.
7. Contractor shall deliver to DPU an Excel workbook and summary memo of the work performed during Phase 3, Step 4. DPU shall review the memo and approve as complete or negotiate modifications with Contractor prior to proceeding to Phase 3, Step 5.

Step 5: Stochastic Assessment of 10 Candidate Portfolios

1. For each of the ten (10) portfolios developed and approved in Step 4 above, Contractor shall evaluate the cost, reliability, diversification, and sustainability attributes as per the metrics identified and approved in Phase 1 and then:
 - a. Contractor shall perform a stochastic forecasting process to assess the 90th percentile of the portfolio costs, which provides an indication of risk parameters of the 10 candidate portfolios.
 - b. Contractor shall apply stochastic analysis to variables including forecasts of power prices, fuel prices and load.
 - c. Based on the results of the stochastic assessments of the 10 candidate portfolios, Contractor shall discuss the results with the DPU team, evaluate the portfolios' performance on the key metrics developed in Phase 1 and the goals and objectives established in Phase 1 and refined in Phase 2, and identify the portfolio that best meets the key metrics and goals and objectives (the "recommended portfolio").
 - d. Upon DPU's request and pursuant to Contractor's proposal, Contractor shall perform additional sensitivity analysis of the recommended portfolio.
 - e. Contractor shall discuss and finalize within the IRP report the key elements and timeline of the recommended portfolio resources.
2. Contractor shall deliver to DPU an Excel workbook and summary memo of the stochastic assessment results for the candidate portfolios. DPU shall review the memo and approve as complete or negotiate modifications with Contractor prior to proceeding to Phase 3, Step 5.

d. Phase 4: Presentations to the Board of Public Utilities.

1. Contractor shall make two presentations to obtain BPU feedback and concurrence. These shall occur at the following stages of the Project:
 - a. 50% Presentation to BPU - Contractor shall prepare a PowerPoint® presentation and present to the Board of Public Utilities ("BPU") following the completion of Phase 3, Step 3, (at approximately 50 percent completion of the Project) pursuant to the Project Schedule, either in-person or remotely at the County's discretion. Contractor shall present to the BPU a preliminary review of the post-2025 ECA options, the DPU's resource options considering the adopted policies by the DPU and the evolving WECC market conditions under different state of the world scenarios.
 - b. 90% Presentation to BPU - Contractor shall prepare a PowerPoint® presentation and present to the Board of Public Utilities ("BPU") following the completion of Phase 3, Step 5, (at approximately 90 percent completion of the Project) pursuant to the Project

Schedule, either in-person or remotely at County's discretion. Contractor shall present to the BPU the stochastic analysis process and results, the preliminary selection of the recommended strategy that best meet the BPU's objectives, and the recommended next steps for implementation.

2. For each meeting, Contractor shall develop a presentation in PowerPoint® based on detailed modeling assumptions and results (inputs, assumptions, calculations, models, tables, graphs, and charts) in Excel. Contractor shall clearly document key findings, assumptions, methodology, and acronyms. Contractor shall provide a supplemental memo to document the presentation in a written report style in greater detail to the DPU. Prior to each meeting, Contractor shall submit the presentation materials to DPU for review at least two (2) weeks prior to the scheduled presentations.
3. Following the 50% and 90% presentations to BPU, Contractor shall deliver to DPU the Power point presentation and a summary memo stating the questions, comments and other feedback from BPU. DPU shall review the memo and approve as complete or negotiate modifications with Contractor prior to proceeding to the next steps.

e. Phase 5: Completion of IRP (Final Report including Implementation Plans.

1. Following Phase 4, Contractor shall work with the DPU to develop responses and resolutions to BPU questions, comments, and other feedback. Contractor shall prepare and electronically deliver in MS Word and PDF format, a comprehensive IRP report ("IRP report") to guide the resource decisions and assure compliance with adopted strategic objectives.
2. The IRP report shall cover a 20-year planning horizon and fully document DPU's and LANL's key objectives, technology screening, state-of-the-world scenarios and deterministic portfolio analysis, stochastic portfolio analysis, recommended portfolios, and an implementation plan. The report shall explicitly address each of the eight key issues described in Section A, item 4.
3. The IRP shall discuss the recommended strategy and next steps for implementation. The IRP conclusion shall be based on a balanced score card of all portfolios across key objectives and metrics established in Phase 1 of the IRP. Contractor shall deliver the IRP report with an outline structure as described in Contractor's proposal to County, with changes to that outline as agreed upon by Contractor and County.
4. Contractor shall deliver a draft version of the IRP report in MS Word format to DPU for review and comment.
5. Contractor shall fully document and archive the model assumptions and results for future IRP updates.
6. Contractor shall follow the following outline for the IRP, to be modified as agreed upon by Contractor and DPU:

Acknowledgements and Forwards

Acronyms

Chapter 1: Executive Summary

Chapter 2: Introduction and Background

A. LAC DPU

B. LANL

C. EAC and Post-2025 Options

Chapter 3: Objectives and Considerations

A. Development since Last Integrated Resource Plan

B. Objectives of the IRP

C. Major Planning Considerations

i. Carbon Neutral Goal

ii. Resource Adequacy

- iii. Operational Requirements – Spinning Reserve, Ramping Requirements
- Chapter 4: State of the World Scenarios
- Chapter 5: Post-2025 Options Screening
- Chapter 6: WECC EIM Implications
- Chapter 7: Resources Considerations
 - A. Existing Policies and Programs
 - B. Distributed Energy Resources
 - C. Energy Efficiency Resources
 - D. Demand Response Resources
 - E. DPU Existing and Planned Generation Resources
 - F. LANL Existing and Planned Generation Resources
 - G. Transmission Resources
- Chapter 8: Technology Screening
 - A. Small Modular Nuclear
 - B. Solar
 - C. Wind
 - D. Gas-fired generation resources (combined cycle, combustion turbine, reciprocating engine)
 - E. Battery storage technologies (lithium-ion battery, vanadium flow battery, pump hydro storage, gravel train storage, etc.)
 - F. Hybrid Resources (solar + wind; solar + battery; wind + reciprocating engine, etc.)
 - G. Laramie River Station PPA options
 - H. Levelized Cost of Energy Comparisons

SECTION B. TERM: The term of this Agreement shall commence June 30, 2021, and shall continue through December 31, 2023, unless sooner terminated, as provided herein.

SECTION C. COMPENSATION:

1. **Amount of Compensation.** County shall pay compensation for performance of the Services in an amount not to exceed TWO HUNDRED FORTY-THREE THOUSAND SEVEN HUNDRED FORTY-THREE DOLLARS (\$243,743.00 US), which amount does not include applicable New Mexico gross receipts taxes ("NMGRT"). Compensation shall be paid in accordance with the rate schedule set out in Exhibit "B," attached hereto and made a part hereof for all purposes.
2. **Monthly Invoices.** Contractor shall submit itemized invoices to County's Project Manager showing amount of compensation due, amount of any NMGRT, and total amount payable. Payment of amounts that are not the subject of good faith dispute shall be due and payable thirty (30) days after County's receipt of the invoice. In addition to any other remedies set forth above, and any other remedies available at law, Contractor reserves the right to halt further Services until payment is received on past-due invoices.

SECTION D. TAXES: Contractor shall be solely responsible for timely and correctly billing, collecting and remitting all NMGRT levied on the amounts payable under this Agreement.

SECTION E. STATUS OF CONTRACTOR, STAFF, AND PERSONNEL: This Agreement calls for the performance of services by Contractor as an independent contractor. Contractor is not an agent or employee of County and will not be considered an employee of County for any purpose. Contractor, its agents or employees shall make no representation that they are County employees, nor shall they create the appearance of being employees by using a job or position title on a name plate, business cards, or in any other manner, bearing County's name or logo.

Neither Contractor nor any employee of Contractor shall be entitled to any benefits or compensation other than the compensation specified herein. Contractor shall have no authority to bind County to any agreement, contract, duty or obligation. Contractor shall make no representations that are intended to, or create the appearance of, binding County to any agreement, contract, duty, or obligation. Contractor shall have full power to continue any outside employment or business, to employ and discharge its employees or associates as it deems appropriate without interference from County; provided, however, that Contractor shall at all times during the term of this Agreement maintain the ability to perform the obligations in a professional, timely and reliable manner.

SECTION F. STANDARD OF PERFORMANCE: Contractor agrees and represents that it has and will maintain the personnel, experience and knowledge necessary to qualify it for the particular duties to be performed under this Agreement. Contractor shall perform the Services described herein in accordance with a standard that meets the industry standard of care for performance of the Services.

SECTION G. DELIVERABLES AND USE OF DOCUMENTS: All deliverables required under this Agreement shall, upon Contractor's receipt of payment therefore, become County's sole and exclusive property for its use as provided in this Agreement. All deliverables, including any advice given by Contractor, is provided solely for County's use and benefit and only in connection with the purpose in respect of which the Services are provided. In no event shall Contractor assume any responsibility to any third party to which any advice or deliverables are disclosed or otherwise made available. Nothing contained in this Agreement will be construed to restrict, impair, or deprive Contractor of any of its rights or proprietary interest in technology or products which existed prior to and independent of the performance of Services under this Agreement ("Contractor Pre-Existing Works"). All rights to reuse Contractor Pre-Existing Works and any processes created or utilized by Contractor to generate work product hereunder are reserved to Contractor for the creation of derivative works for Contractor and its other clients, but only if such derivative works or the reuse of such processes does not disclose any of County's confidential information. Contractor shall retain ownership of works, materials, programs, processes, etc. proprietary to Contractor which have been developed or created by Contractor prior to this Agreement, outside the scope of the services rendered under this Agreement, or for use in its business or provision of services generally. Notwithstanding any provision to the contrary, nothing in this Agreement grants County any right, title or interest in Contractor Pre-Existing Works or any other intellectual property developed by Contractor prior to the date of this Agreement, outside the scope of the Services rendered hereunder, or for use in its provision of services generally.

SECTION H. EMPLOYEES AND SUB-CONTRACTORS: Contractor shall be solely responsible for payment of wages, salary, or benefits to any and all employees or contractors retained by Contractor in the performance of the Services. Contractor agrees to indemnify, defend and hold harmless County for any and all claims that may arise from Contractor's relationship to its employees and subcontractors.

SECTION I. INSURANCE: Contractor shall obtain and maintain insurance of the types and in the amounts set out below throughout the term of this Agreement with an insurer acceptable to County. Contractor shall assure that all subcontractors maintain like insurance. Compliance with the terms and conditions of this Section is a condition precedent to County's obligation to pay compensation for the Services and Contractor shall not provide any Services under this Agreement unless and until Contractor has met the requirements of this Section. County requires Certificates of Insurance or other evidence acceptable to County that Contractor has met its obligation to obtain and maintain insurance and to assure that subcontractors maintain like

insurance. Should any of the policies described below be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions. General Liability Insurance and Automobile Liability Insurance shall name County as an additional insured.

1. **General Liability Insurance:** ONE MILLION DOLLARS (\$1,000,000.00) per occurrence; TWO MILLION DOLLARS (\$2,000,000.00) aggregate.
2. **Workers' Compensation:** In an amount as may be required by law. County may immediately terminate this Agreement if Contractor fails to comply with the Worker's Compensation Act and applicable rules when required to do so.
3. **Professional Liability Insurance:** ONE MILLION DOLLARS (\$1,000,000.00) per occurrence; with a ONE MILLION DOLLARS (\$1,000,000.00) annual aggregate, without any restrictive "negligent act, negligent error, or negligent omission" clause, and sufficient to a three (3) year period from completion of this contract, against any and all claims which may arise from the Contractor's negligent performance of work described herein.
4. **Automobile Liability Insurance for Contractor and its Employees:** ONE MILLION DOLLARS (\$1,000,000.00) combined single limit per occurrence; TWO MILLION DOLLARS (\$2,000,000.00) aggregate on any owned, and/or non-owned motor vehicles used in performing Services under this Agreement.

SECTION J. RECORDS: Contractor shall maintain, throughout the term of this Agreement and for a period of six (6) years thereafter, records that indicate the date, time, and nature of the services rendered. Contractor shall make available, for inspection by County, all financial records, books of account, memoranda, and other documents pertaining to County upon at least 7 calendar days' advance written notice.

SECTION K. APPLICABLE LAW: Contractor shall abide by all applicable federal, state and local laws, regulations, and policies and shall perform the Services in accordance with all applicable laws, regulations, and policies during the term of this Agreement. In any lawsuit or legal dispute arising from the operation of this Agreement, Contractor agrees that the laws of the State of New Mexico shall govern.

SECTION L. NON-DISCRIMINATION: During the term of this Agreement, Contractor shall not discriminate against any employee or applicant for an employment position to be used in the performance of the obligations of Contractor under this Agreement, with regard to race, color, religion, sex, age, ethnicity, national origin, sexual orientation or gender identity, disability or veteran status.

SECTION M. INDEMNITY: Contractor shall indemnify, hold harmless and defend County, its Council members, employees, agents and representatives, from and against all liabilities, damages, claims, demands, actions (legal or equitable) brought or asserted by a third party, and costs and expenses, including without limitation attorneys' fees related thereto, arising from Contractor's negligence or willful misconduct in the course of its performance hereunder or breach hereof and that of its employees, agents, representatives and subcontractors. EXCEPT AS SPECIFICALLY SET FORTH IN THIS AGREEMENT, IN NO EVENT WILL EITHER PARTY BE LIABLE TO THE OTHER PARTY OR ANY THIRD PARTY FOR INDIRECT, INCIDENTAL, EXEMPLARY, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION DAMAGES FOR LOST PROFITS, REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT OR OTHERWISE AND EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE PARTIES' LIABILITY TO EACH

OTHER AND THEIR RESPECTIVE AFFILIATES FOR ANY AND ALL CLAIMS RELATING TO THIS AGREEMENT OR THE SERVICES OR DELIVERABLES PROVIDED BY CONTRACTOR HEREUNDER, WHETHER A CLAIM BE IN TORT, CONTRACT, OR ANY OTHER THEORY OF LAW, AND WHETHER BY STATUTE OR OTHERWISE, SHALL NOT, IN THE AGGREGATE, EXCEED THE TOTAL AMOUNT OF THE FEES PAID OR PAYABLE TO CONTRACTOR HEREUNDER. Any limitations or exclusions of liability set forth in this Agreement will not apply with respect to (1) claims for bodily injury or death or physical damage to tangible property resulting from either party's negligence or willful misconduct, (2) any claims resulting from either party's gross negligence, or fraudulent or willful misconduct, or (3) claims, losses, damages, costs, fines, penalties, or expenses resulting from either party's violation of any applicable law or regulation.

SECTION N. FORCE MAJEURE: Neither County nor Contractor shall be liable for any delay in the performance of this Agreement, nor for any other breach, nor for any loss or damage arising from uncontrollable forces such as fire, theft, storm, war, or any other force majeure that could not have been reasonably avoided by exercise of due diligence.

SECTION O. NON-ASSIGNMENT: Contractor may not assign this Agreement or any privileges or obligations herein without the prior written consent of County.

SECTION P. LICENSES: Contractor shall maintain all required licenses including, without limitation, all necessary professional and business licenses, throughout the term of this Agreement. Contractor shall require and shall assure that all of Contractor's employees and subcontractors maintain all required licenses including, without limitation, all necessary professional and business licenses.

SECTION Q. PROHIBITED INTERESTS: Contractor agrees that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of its services hereunder. Contractor further agrees that it will not employ any person having such an interest to perform services under this Agreement. No County Council member or other elected official of County, or manager or employee of County shall solicit, demand, accept or agree to accept a gratuity or offer of employment contrary to Section 31-282 of the Los Alamos County Code.

SECTION R. TERMINATION:

- 1. Generally.** County may terminate this Agreement with or without cause upon ten (10) days prior written notice to Contractor. Upon such termination, Contractor shall be paid for Services actually completed to the satisfaction of County at the rate set out in Section C. Contractor shall render a final report of the Services performed to the date of termination and shall turn over to County originals of all materials prepared pursuant to this Agreement. Contractor may terminate this Agreement if County is in breach of any of its obligations hereunder and such breach remains unremedied for 30 days following the delivery of notice to County in writing.
- 2. Funding.** This Agreement shall terminate without further action by County on the first day of any County fiscal year for which funds to pay compensation hereunder are not appropriated by County Council. County shall make reasonable efforts to give Contractor at least ninety (90) days advance notice that funds have not been and are not expected to be appropriated for that purpose.

SECTION S. NOTICE: Any notices required under this Agreement shall be made in writing, postage prepaid to the following addresses, and shall be deemed given upon hand delivery,

verified delivery by telecopy (followed by copy sent by United States Mail), or three (3) days after deposit in the United States Mail:

County:

Project Manager
Incorporated County of Los Alamos
1000 Central Avenue, Suite 130
Los Alamos, New Mexico 87544

With a copy to:

Inc. County of Los Alamos
Attention: County Attorney's Office
1000 Central Avenue, Suite 340
Los Alamos, New Mexico 87544

Contractor:

Ken Ditzel
FTI Consulting, Inc.
8251 Greensboro Drive, Suite 1111
McLean, Virginia 22102

With a copy to:

FTI Consulting, Inc.
Attn: Legal Department
555 12th Street NW, Suite 700
Washington, DC 20004

SECTION T. INVALIDITY OF PRIOR AGREEMENTS: This Agreement supersedes all prior contracts or agreements, either oral or written, that may exist between the parties with reference to the services described herein and expresses the entire agreement and understanding between the parties with reference to said services. It cannot be modified or changed by any oral promise made by any person, officer, or employee, nor shall any written modification of it be binding on either party until approved in writing by both County and Contractor.

SECTION U. NO IMPLIED WAIVERS: The failure of either party to enforce any provision of this Agreement is not a waiver by such party of the provisions or of the right thereafter to enforce any provision(s).

SECTION V. SEVERABILITY: If any provision of this Agreement is held to be unenforceable for any reason: (i) such provision will be reformed only to the extent necessary to make the intent of the language enforceable; and (ii) all other provisions of this Agreement will remain in effect.

SECTION W. CAMPAIGN CONTRIBUTION DISCLOSURE FORM: A Campaign Contribution Disclosure Form was submitted as part of the Contractor's Response and is incorporated herein by reference for all purposes.

SECTION X. LEGAL RECOGNITION OF ELECTRONIC SIGNATURES: Pursuant to NMSA 1978 § 14-16-7, this Agreement may be signed by electronic signature.

SECTION Y. DUPLICATE ORIGINAL DOCUMENTS: This document may be executed in two (2) counterparts, each of which shall be deemed an original and all of which shall constitute a single instrument.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date(s) set forth opposite the signatures of their authorized representatives to be effective for all purposes on the date first written above.

ATTEST

INCORPORATED COUNTY OF LOS ALAMOS

NAOMI D. MAESTAS
COUNTY CLERK

BY: _____
PHILO S. SHELTON, III, P.E. **DATE**
UTILITIES MANAGER

Approved as to form:

J. ALVIN LEAPHART
COUNTY ATTORNEY

FTI CONSULTING, INC, A MARYLAND CORPORATION

BY: _____
KEN DITZEL **DATE**
SENIOR MANAGING DIRECTOR

Exhibit "A"

Project Schedule

AGR21-41

The following table shows Contractor's proposed Project Schedule which shall be modified and finalized at the above referenced Project Kick-off Meeting.

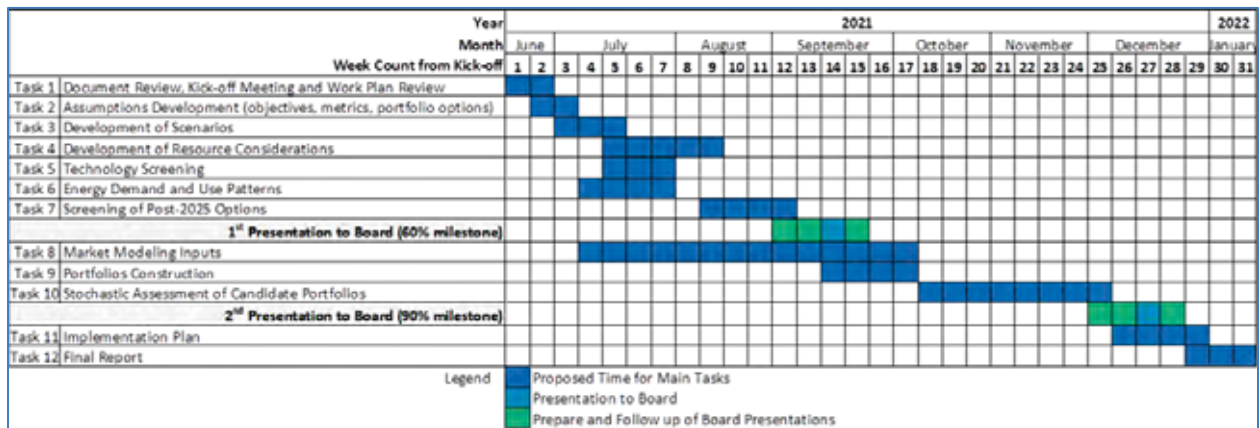


Exhibit "B"
Compensation Rate Schedule
AGR21-41

Contractor shall charge a fixed price of \$151,000 for the Core Initial IRP Study Core, which entails stochastic analysis of ten (10) candidate portfolios as defined in Section A above. This fixed-price includes travel to Los Alamos for two (2) in-person presentations to County. Should the presentations be conducted remotely, and travel not be necessary, the not-to-exceed expenses will not be charged to DPU. If additional in person-presentations are requested by County, the cost for each presentation would be capped at \$4,500 per presentation and will be billed at cost. Contractor shall request and receive approval from the DPU prior to making any travel plans.

If requested by County to analyze more than ten (10) portfolio options as indicated in the Section A above, Contractor shall bill based upon the rate schedule defined below:

IRP Study Core Scope Budget											
	Name	Ken Ditzel	Fengron g Li	Venkl Venkateshwara	Mitch DeRubis	Mitch Nagel	Iqra Nadeem	Ran Li	Total	Expense	Budget
	Location	McLean VA	McLean VA	McLean VA	Pittsburg PA	McLean VA	McLean VA	McLea n VA	Hours	(USD)	(USD)
Task 1	Document Review, Kick-off Meeting	1	8	0	0	0	3	3	15		\$ 5,430.00
Task 2	Assumptions Development	1	8	2	0	0	10	10	31		\$ 9,690.00
Task 3	Development of Scenarios	1	5	5	5	5	5	10	36		\$ 11,640.00
Task 4	Development of Resource Considerations	1	10	0	3	0	10	10	34		\$ 10,740.00
Task 5	Technology Screening	1	5	5	3	10	5	10	39		\$ 12,565.00
Task 6	Energy Demand and Use Patterns	1	5	0	3	0	10	10	29		\$ 8,578.00
Task 7	Screening of Post-2025 Options	1	10	0	3	0	10	10	34		\$ 10,740.00
1st Presentation to Board (60% Milestone)		4	6	0	0	0	0	0	10	\$ 2,500.00	\$ 7,155.00
Task 8	Market Modeling Inputs	1	5	0	5	5	5	15	36		\$ 10,478.00
Task 9	Portfolio Construction	1	10	5	5	10	5	10	46		\$ 15,428.00
Task 10	Stochastic Assessment	1	10	1	15	10	10	20	67		\$ 20,623.00
2nd Presentation to Board (90% Milestone)		4	6	0	0	0	0	0	10	\$ 2,500.00	\$ 7,155.00
Task 11	Implementation Plan	2	8	2	2	0	0	0	14		\$ 6,055.00
Task 12	Final Report	2	10	2	5	5	10	10	44		\$ 14,445.00
Total		22	106	22	49	45	83	118	445	\$ 5,000.00	\$ 150,722.00

IRP Budget (2023)

	Name	Ken Ditzel	Fengron g Li	Venkl Venkateshwara	Mitch DeRubis	Mitch Nagel	Iqra Nadeem	Ran Li	Total	Expense	Budget
	Location	McLean VA	McLean VA	McLean VA	Pittsburg PA	McLean VA	McLean VA	McLean VA	Hours	(USD)	(USD)
Task 1	Document Review, Kick-off Meeting	1	4	0	0	0	1.5	1.5	8		\$ 2,973.00
Task 2	Assumptions Development	0	4	0	0	0	5	5	14		\$ 4,155.00
Task 3	Development of Scenarios	0	2.5	2	2.5	2.5	2.5	5	17		\$ 5,346.00
Task 4	Development of Resource Considerations	0	5	0	1.5	0	5	5	16.5		\$ 5,113.00
Task 5	Technology Screening	1	2.5	2	1.5	5	2.5	5	19.5		\$ 6,324.00
Task 6	Energy Demand and Use Patterns	1	2.5	0	1.5	0	5	5	15		\$ 4,546.00
Task 7	Screening of Post-2025 Options	1	5	0	1.5	0	5	5	17.5		\$ 5,628.00
1st Presentation to Board (60% Milestone)		4	6	0	0	0	0	0	10	\$ 2,500.00	\$ 7,155.00
Task 8	Market Modeling Inputs	1	2.5	0	2.5	2.5	2.5	7.5	18.5		\$ 5,496.00
Task 9	Portfolio Construction	1	5	2	2.5	5	2.5	5	23		\$ 7,755.00
Task 10	Stochastic Assessment	1	5	1	6	5	5	15	38		\$ 11,260.00
2nd Presentation to Board (90% Milestone)		4	6	0	0	0	0	0	10	\$ 2,500.00	\$ 7,155.00
Task 11	Implementation Plan	1	4	2	1	0	0	0	8		\$ 3,460.00
Task 12	Final Report	1	5	2	2.5	2.5	5	5	23		\$ 7,655.00
Total		17	59	11	23	22.5	41.5	64	238	\$ 5,000.00	\$ 84,021.00
TOTAL PROJECT											\$ 234,743.00
OPTIONAL MEETINGS											\$9,000.00
TOTAL NOT TO EXCEED											\$ 243,743.00

Exhibit "C"
CAMPAIGN CONTRIBUTION DISCLOSURE FORM
AGR21-41

Any prospective contractor seeking to enter into a contract with the Incorporated County of Los Alamos must file this form disclosing whether they, a family member or a representative of the prospective contractor has made a campaign contribution to an applicable public official during the two (2) years prior to the date on which prospective contractor submits a proposal or, in the case of a sole source or small purchase contract, the two (2) years prior to the date prospective contractor signs the contract, if the aggregate total of contributions given by the prospective contractor, a family member or a representative of the prospective contractor to the public official exceeds TWO HUNDRED FIFTY DOLLARS (\$250.00) over the two (2) year period.

THIS FORM MUST BE FILED BY ANY PROSPECTIVE CONTRACTOR WHETHER OR NOT THEY, THEIR FAMILY MEMBER, OR THEIR REPRESENTATIVE HAS MADE ANY CONTRIBUTIONS SUBJECT TO DISCLOSURE.

The following definitions apply:

"Applicable public official" means a person elected to an office or a person appointed to complete a term of an elected office, who has the authority to award or influence the award of the contract for which the prospective contractor is submitting a competitive sealed proposal or who has the authority to negotiate a sole source or small purchase contract that may be awarded without submission of a sealed competitive proposal.

"Campaign Contribution" means a gift, subscription, loan, advance or deposit of money or other things of value, including the estimated value of an in-kind contribution, that is made to or received by an applicable public official or any person authorized to raise, collect or expend contributions on that official's behalf for the purpose of electing the official to either statewide or local office. "Campaign Contribution" includes the payment of a debt incurred in an election campaign, but does not include the value of services provided without compensation or unreimbursed travel or other personal expenses of individuals who volunteer a portion or all of their time on behalf of a candidate or political committee, nor does it include the administrative or solicitation expenses of a political committee that are paid by an organization that sponsors the committee.

"Contract" means any agreement for the procurement of items of tangible personal property, services, professional services, or construction.

"Family member" means a spouse, father, mother, child, father-in-law, mother-in-law, daughter-in-law or son-in-law of:
(a) a prospective contractor, if the prospective contractor is a natural person; or
(b) an owner of a prospective contractor;

"Pendency of the procurement process" means the time period commencing with the public notice of the request for proposals and ending with the award of the contract or the cancellation of the request for proposals.

"Person" means any corporation, partnership, individual, joint venture, association or any other private legal entity.

Prospective contractor means a person who is subject to the competitive sealed proposal process set forth in the Procurement Code or is not required to submit a competitive sealed proposal because that person qualifies for a sole source or a small purchase contract.

Representative of a prospective contractor means an officer or director of a corporation, a member or manager of a limited liability corporation, a partner of a partnership or a trustee of a trust of the prospective contractor.

DISCLOSURE OF CONTRIBUTIONS: (Report any applicable contributions made to the following - COUNTY COUNCILORS: Denise Derkacs; David Izraelevitz; David Reagor; James Robinson; Randal Ryt; Sara Scott; and Sean Williams.)

Contribution Made By:			
Relation to Prospective Contractor:			
Name of Applicable Public Official:		Governor _____	
Contribution(s) Date(s)	Contribution Amount(s):	Nature of Contribution(s):	Purpose of Contribution(s):
	\$		
	\$		
	\$		
	\$		
	\$		


(Attach extra pages if necessary)

Signature Date

Title (position)

—OR—

NO CONTRIBUTIONS IN THE AGGREGATE TOTAL OVER TWO HUNDRED FIFTY DOLLARS (\$250.00) WERE MADE to an applicable public official by me, a family member or representative.



Signature Date
March 18, 2021
Senior Managing Director

Title (position)