

7 November 2023

Mr. James Nail
Director
Independence Power and Light
Independence, MO

RE: Cost Proposal for IPL Cost Benefit Analysis and 20-Year Strategic Plan

Dear Jim:

Per our conversation last week, attached is our cost proposal for the "eyes wide open" cost-benefit analysis and 20-year strategic plan for IPL and the City of Independence.

We understand the City's desire to have completely different stand-alone analyses for its decision-making purposes. However, we would like to point out that certain information should be common between the analyses. These include the system condition assessment, capital plan, discount rates, analysis period, and foundational documents such as the Charter, staffing levels, and PPAs.

To ensure the independence of the two analyses, we will set up two project teams. The cost-benefit analysis team will be led by myself, and Heather Bailey will lead the strategic plan analysis. Team members will overlap between teams in their area of expertise to maximize efficiency. We will meet as an entire team only on common issues and data. The team leads will not direct work outside of their team's focus area.

As an additional safeguard to ensure unbiased analysis, we have retained Mr. Enrique Bacalao in a project oversight role to test for bias in either of the analyses and ensure that each of the analyses stands on its own economic merit. Mr. Bacalao is the former Chief Economist of the Wisconsin Public Service Commission. His professional experience also includes time as an international banker with financing experience for nuclear and non-nuclear power projects and large multi-country infrastructure projects, and as Assistant Treasurer and Director of Financing for Alliant Energy Corporation.

We have included 9 in-person meetings and presentations through July 2024 in our proposal. We are happy to support additional meetings beyond that date, but since the duration of activities beyond then is uncertain, we have not included any estimated costs for such additional work.

Our team believes it is crucial to understand that Independence Power and Light and the City of Independence participate in a complex electric energy marketplace within various federal, state, and local jurisdictions. Whatever choices voters and/or City leadership make before November 2025 may be subject to formal review and approval by the Federal Energy Regulatory Commission, the Missouri Public Service Commission, the Southwest Power Pool, the North American Electric Reliability Corporation, or other regulatory agencies.

Our previous experience shows that the path to privatization or municipalization takes several years at best and up to a decade in an environment with highly motivated intervenors. The modeling and data developed during this engagement may be used to form the basis of presentations before regulatory bodies and must withstand scrutiny by outside experts. While we understand the need for a transparent process with all stakeholders, we strongly recommend that work products produced during the cost-benefit engagement be developed under an agreement with the City's attorney to provide an attorney-client privilege relationship. That way, the City can control what information it wants to release and when. Potential offerors could use valuation analyses and cost-benefit numbers to put the City at a disadvantage in future negotiations should they be released in an uncontrolled fashion.

We will provide an "eyes wide open" cost analysis for 20 years. The strategic planning team will develop the 20-year capital plan as part of its tasking and share the net present value of the capital plan with the cost-benefit team.

Task 1: Kickoff Meeting and Initial Data Requests

Upon contract award, our team will coordinate with the IPL Project Manager to understand contract communication protocols for information requests, periodic progress reporting, on-site scheduling, and the deliverables schedule.

Following the kickoff meeting, we will schedule a face-to-face or virtual meeting with appropriate IPL and City personnel to set up follow-up interviews.

Our initial data request includes the following information common to both analyses:

- Governance
 - IPL Charter
 - PUAB Charter
 - Current strategic plan

- Organizational
 - Current organizational chart with staffing levels
 - Job classification definitions and bargaining unit contracts
 - High-level roles and responsibilities of key IPL personnel
 - City organization chart identifying City personnel that support IPL but are not on the IPL payroll
- Financial
 - Current capital and O&M budgets
 - Historical capital and O&M spending compared to budget
 - Balance sheets for the last 5 years
 - Current listing of IPL bonds, amortization schedules, and their respective covenant requirements
 - Current listing of City of Independence bonds and their requirements
 - City of Independence listing of shared services and accounting codes used for cost allocation purposes
 - IPL O&M cost records for the past 5 years
 - Revenue by type, category, and customer class for the past 5 years
 - Historic overtime information
 - Labor costs by job class, average salary per pay grade, and average annual pay increase
 - Current electric rate schedule
 - Copy of IPL revenue model (cost of service)
 - Most current LAGERS obligation projection for IPL personnel and their contribution to the LAGERS fund
 - PILOT payment history for the past 5 years
 - If possible, the project economic cost to the City if IPL could not self-generate during the February 2021 winter storm
 - Fund transfers to and from IPL for other City departments and utilities
 - Debt service coverage for the last 5 years
- Contractual - Copies of all:
 - Power Purchase Agreements and contracts for plant capacity or energy
 - IPL agreements with FERC, NERC, SPP and other entities
 - Environmental compliance requirements for Blue Valley ash ponds and all other environmental obligations related to IPL operations
 - Listing of services IPL provides the City outside electrical system operations,

i.e., streetlights, fiber network maintenance, fleet services, web cameras, technical support, or other services

- Asset Records
 - IPL assets and infrastructure records showing the type, quantity, age, installed and depreciated costs, net book value, and condition of existing assets, including relevant GIS databases.
 - Copies of studies performed on IPL's existing generation assets
 - Copies of previous studies performed in the last 5 years
 - Any reports on current distribution system assets condition (substations, transformers, vegetation management, etc.)
 - Current Information and Operational Technology (IT and OT) assets
 - Number and type of IPL fleet vehicles
 - Listing of buildings used by IPL that would be vacated if another entity operated the electric system
 - IPL warehouse's current inventory
- Performance Management
 - Copies of any IPL performance dashboards or management information tools
 - Any JD Power/APPA or other customer satisfaction data
 - APPA benchmarking information, which includes IPL as a participant
- Capital Planning Specific Data Request
 - Complete and up-to-date Milsoft Power System Model, including:
 - Geographically accurate locations
 - Residential, commercial, industrial, and municipal loads
 - Customer loads, meters, secondary services
 - Feeder conductors, construction type, phasing
 - Substation transformers
 - Transmission conductors, construction type
 - Generation
 - External interconnections
 - Normal and alternate feeder configurations
 - City's growth plan
 - Utility outage reports for the past five years
 - Recommendations for O&M staff regarding improvements

- Summer and winter peak demand for each feeder, for the past five years
- Historical growth trends
- Potential future major industrial or large commercial loads
- Any plans for:
 - Beneficial electrification
 - Residential, community and commercial solar
 - Distributed generation
 - Battery storage
 - Overhead to underground conversions
- Existing plans and budgets for:
 - Maintenance and replacement
 - New installations and upgrades
 - Overhead to underground conversions
 - Generation modifications, retirements, upgrades
 - Existing equipment testing programs and reports, for example:
 - Pole testing
 - Substation equipment
 - Transmission equipment

Task 2: Data Review

Our team will review the provided information and follow up as appropriate with IPL personnel.

Tasks 3, 4 and 5: Structured Interview Process and Strategic Planning Workshops

Our team anticipates conducting interviews at IPL headquarters and various remote locations. We have budgeted time for approximately 30 interviews and 6 strategic workshops. We will use virtual and face-to-face meetings as required by the topic. Initial interview topics common to both analyses will include:

- Project management and capital budgeting
- Technology management and shared applications
- Operations and maintenance
- Backoffice shared functions (e.g., HR, finance, IT, contracting & procurement, comms, etc.)
- Review of accounting systems and cost allocation
- Long-term debt and bonds
- PPA and capacity agreements

- IPL level of service
- Environmental obligations
- LAGERS obligations
- Customer service call volumes attributable to IPL

Interviews and activities specific to the Strategic Planning analysis will include establishing a Strategic Planning Task Force with 5-7 key stakeholders and holding a kickoff meeting. The Task Force will be essential in developing an IPL vision, measures, and a draft twenty-year roadmap for IPL. DKMT anticipates facilitating strategic planning sessions with the Task Force, IPL, City, and PUAB leadership to define a stabilized and well-run IPL.

Questions to be addressed include, but are not limited to:

- What is the City willing to do electric rate-wise to attract commercial and industrial customers?
- Are there any zero-carbon goals IPL planning needs to consider?

Can IPL partner with other municipalities on common electric issues?

- Could other municipalities invest in IPL built generation?
- What level of customer service should IPL aim to achieve, first quartile performance, second quartile performance, etc.?
- Has the City been fully reimbursing IPL for its services?
- What future electric service options does IPL desire (*e.g.*, energy efficiency, DER, microgrids, battery storage, etc.)?

Ms. Heather Bailey led several stakeholder planning sessions while leading Boulder's municipalization efforts. We assume IPL will coordinate stakeholder meetings and required logistics.

The draft vision and roadmap will be presented to the public, as desired by the Council, for input and feedback on the plan.

These public forum sessions will be used to educate the public on the utility industry and the issues unique to IPL.

Tasks 4 and 5: System Inventory and Valuation

As part of Task 1 Data Request, we will request the following information:

- a. Complete GIS database including:
 - i. Date of installation
 - ii. Original cost, if available
 - iii. Transmission Equipment:
 - 1. Poles/structures
 - 2. Overhead conductors
 - 3. Overhead shield wire
 - 4. Fiber optic cables, if applicable
 - iv. Distribution Equipment
 - 1. Overhead System:
 - a. Poles
 - b. Primary conductor
 - c. Secondary conductors
 - d. Transformers
 - e. Switching/protection equipment such as reclosers and sectionalizers
 - f. Regulators
 - g. Capacitors
 - h. Services
 - 2. Underground System:
 - a. Pad-mount equipment
 - i. Transformers
 - ii. Switches
 - iii. Other
 - b. Risers
 - c. Conduit and cable
 - d. Vaults
 - e. Services
 - 3. Meters
- b. Substation Data
 - i. Single line diagrams
 - ii. General arrangements
 - iii. Equipment ratings and vintage
 - 1. Transformers
 - 2. Breakers
 - 3. Switches
 - 4. Control buildings
 - 5. Switchgear

6. Protection and control equipment

A two-person team will conduct a field assessment of IPL infrastructure. One person will assess transmission and distribution facilities over approximately 9 days. One person will assess generation and substation facilities over 6 days. Our team will require support from IPL for escorted access to generating plants and substations. We plan to assess two generating plants and four substations per day. We ask that IPL open the pad mount and underground distribution vaults for visual inspection.

Our personnel will not enter private property except for IPL facilities accompanied by escorts. All other field assessments will be performed from public property/right-of-way.

Any imminent issues observed during field assessment will be immediately reported to IPL.

Field Assessment Sampling Plan

Facilities will be assessed for condition and age under the following sampling plan:

- **Substations** – 15 total (one 161kV Switchyard, three 161/69kV Substations, 11 69/13.2kV Substations). All substations will be assessed.
- **Generating Plants** – three total (two units per plant). All generating plants will be assessed.
- **Transmission Lines** (25 miles 161kV, 51 miles 69kV). All transmission lines will be assessed.
- **Distribution System** – 795 miles of overhead/underground. 10% (approximately 80 miles) to be assessed.

Equipment Analysis and Valuation

Facility ratings will be based on condition and remaining life using the following system:

Rating	Condition	Definition	Remaining Life (%)
5.1-6.0	Excellent	New, recent construction or extremely well-maintained	81%-100%

Rating	Condition	Definition	Remaining Life (%)
4.1-5.0	Very Good	Recommend routine inspection	61%-80%
3.1-4.0	Good	Recommend routine maintenance	41%-60%
2.1-3.0	Fair	Maintenance required soon	21%-40%
1.1-2.0	Poor	Replace soon	0%-20%
0-1.0	Obsolete	Recommend immediate replacement	No value

Our team will create a tabulation of facilities by type and by FERC account. This information will be used to determine Replacement Cost New (RCN) values (AACE Level 4 or 5 estimate classification). We will then apply assessment ratings to facilities for valuation purposes. A Condition Assessment Report will be provided with the facilities sampled, ratings, and illustrations. Based on our experience, this report can be used to true up the utility's listing of equipment and augment current capital planning tools.

Should the City of Independence decide to divest itself of IPL, a review of recent transactions would be appropriate to gauge market activity and determine the premiums paid above RCN, if any, in the market.

Task 6 System Model and 20 Year Capital Plan

As part of the strategic planning analysis, a 20-year Capital Plan will be developed to maintain, expand, or rebuild IPL infrastructure over the next two decades. The Capital Plan analysis will include modeling of proposed projects and upgrades, including load flow and voltage drop studies. The 20-year plan will cover generation, transmission, and distribution systems. It will include descriptions, study models, illustrative maps, schedules, and cost estimates for ordinary replacements and maintenance, as well as specific projects for upgrades, new installations, and conversions.

The 20 year plan will also identify resource requirements and options for fulfilling resource needs to include PPAs, new build generation, life extension, and other options.

Task 9 and 10: Shared Services Evaluation

The City provides shared services to IPL, for which it charges an allocation of monthly shared costs. These charges include City management salaries, finance, IT, and others. The list of services and methodology for allocating costs to IPL and the other utilities was unclear in our previous engagement. Our team will review current shared services charging practices to identify the impact on areas that would no longer receive transfer payments from IPL for the Cost Benefit Analysis. The Strategic Planning analysis will identify opportunities for efficiency improvements and calculate 20-year shared service costs.

We will also examine whether any areas exist where the City reimburses IPL for services or where IPL provides services on a *gratis* basis. (i.e., GIS, streetlights, meter reading, billing, customer service reps), and how much it would cost the City to replace these services.

Task 11 and 12: Regulatory and Contract Review

The cost-benefit analysis requires that we calculate the cost to unwind the City's 12.3% ownership of the Dogwood Generating Facility and its current PPA agreements. The strategic planning group will calculate the cost of these contracts over the next 20 years, identify efficiencies and/or replacement options, and the costs of new generation as appropriate.

During our last engagement, IPL identified the following PPAs.

Plant Name	Fuel Type	Accredited Capacity
Nebraska City 2 (expires 2049)	Coal	57
Iatan 2 (expires 2050)	Coal	53
Solar (expires 2042)	Solar	1
Marshall Wind (expires 2036)	Wind	6.7
Smoky Hills (expires 2029)	Wind	4

We will also examine the current capacity obligations requiring IPL to supply SPP with capacity and/or energy from its CTs.

In addition to power-related obligations, the cost-benefit team will examine bonds tied to IPL revenues, whether they are issued by IPL or the City, to assess the impact of a loss of IPL revenue on City finances. We assume the City will consult with its financial advisor to quantify the impact on its bond rating.

The strategic planning group will be consulting with the City's financial advisor to identify borrowing capacity for additional investments in IPL and to develop a correlation to rate requirements.

Other long-term obligations to be included in the Contract/Regulatory Review include the impact on the LAGERS pension fund if it loses IPL employee contributions, and the long-term costs associated with assuming IPL environmental obligations in the cost-benefit analysis.

Task 13 and 14: Financial and Risk Impact Analysis

The cost-benefit financial and risk analysis will identify the “eyes wide open” financial impact to the City of Independence if it were to choose to divest itself of IPL.

The strategic planning team will develop a 20-year revenue requirement and associated rate requirements to fund operations, maintenance, and capital investments. Our team has extensive knowledge and experience creating revenue models and validating cost allocations for electric utilities. Several of our team members have audit experience as members of the Texas PUC.

We use the DOE Cost Estimating Guide (DOE G 413.3-21A – 2018) to help define an appropriate level of model detail. Based on our current understanding of the City of Independence’s objectives, and in order to support effective decision-making, we believe an intermediate level of detail (DOE Level 4 model) is appropriate to provide good results, identify a range of possible outcomes, and build an understanding of the key uncertainties which impact those outcomes.

Our Level 4 cost models use stochastic modeling to provide a standardized method to identify key cost impacts and variables that drive uncertainties. While many existing templated models are available, we will work with the City of Independence to ensure

that the model we use for the cost-benefit analysis most appropriately represents the City of Independence and IPL's infrastructure. We will work closely across the team specialties (financial, legal, engineering, customer, operations, etc.) with IPL and City staff's input to identify and estimate likely input variations.

In building our models, we use many best practice techniques to help define the structure and relationships between the various inputs. One technique we use is to pictorially define the strategic objective and back out what may be the influencers of the strategic outcome.

Both analyses will investigate each of the following cost categories:

- Load forecasts
- PPAs
- Historic utility data
- Billing
- Metering
- Distribution
- Generation
- Other O&M expenses
- Capital improvements
- Logistics
- Transmission
- Shared Services Cost Allocation Model
- Taxable bonds
- Tax-exempt bonds
- Loans
- Staffing
- Pension funds
- Environmental liabilities
- Fund transfers between City departments
- Nonpower services provided by IPL

Items to be evaluated in the risk model may differ between the analyses. Risks identified to date include:

- Uncertainties regarding the cost of power
- Uncertainties regarding new electric rates for customers in the present IPL territory
- Uncertainties regarding franchise revenues from a new provider
- Value of IPL assets
- Termination costs associated with PPA and capacity agreements
- Bond covenant requirements associated with IPL and City bonds
- Impact of the Infrastructure Investment and Jobs Act on monetization of municipal tax credits
- Cost allocation impacts of removing IPL from City of Independence revenues and tax base to include cost of obtaining alternative providers

- Cost allocation impacts of removing employees supporting IPL for City of Independence payrolls to include retirees, pension, and benefits costs
- Impacts of alternate divestiture scenarios (distribution only, transmission only, etc.)

Task 15 and 16: Qualitative Analysis

We will perform a qualitative analysis of IPL services in addition to our quantitative analysis. This analysis will discuss the impacts of loss of local control on services, rate-making capabilities, and other qualitative topics.

Tasks 17-21: Draft and Final Reports

Draft reports will be provided to IPL and the Council for review and comment. Final reports will be delivered in July 2024 addressing IPL and City comments.

Task 22: Communication and Stakeholder Engagement

We have included the cost of interviews and biweekly progress meetings through our proposed final report delivery date of July 2024. We realize that most meetings can be done remotely. For budgeting purposes, we have included 9 in-person meetings in Independence for potential presentations to the Council, PUAB, and others as directed by IPL.

This proposal does not include costs for in-person meetings beyond July 2024 since the level of support beyond that date is currently unknown. Travel costs for in-person meetings are estimated at approximately \$1500 per trip.

Travel

Our budget includes travel costs for in-person meetings and strategic planning meetings and presentations beyond those included in the system inventory and capital plan development budgets.