



Independence Power and Light Cost Benefit Analysis

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Prepared for:

City of Independence, Missouri

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Executive Summary

DKMT Consulting LLC was engaged to provide an independent analysis of the costs incurred and the benefits received from the City of Independence's ownership of Independence Power and Light. The purpose of this analysis is to inform decision-makers and stakeholders in their evaluation of alternative ownership options and governance models for IPL. This cost-benefit analysis discusses both qualitative and quantitative issues impacting the benefits of owning a municipal electric utility and the costs of operating and maintaining one. This cost-benefit analysis was performed independently of a parallel strategic planning effort assessing various scenarios to optimize the performance of IPL for the benefit of the City of Independence and its citizens. Our team performed a high-level visual inspection of IPL's transmission and distribution systems and found them to be well-maintained and robustly designed.

Multiple methods exist for valuing an electric system, including an income approach, original cost less depreciation, and value per customer. Readers are cautioned that the value shown does not represent a "sale price" for IPL. Based on estimated book values and a recent market transaction for similar assets, we approximate the value of IPL assets to be \$668 million.

There is currently \$267 million in outstanding principal on bonds tied to revenues from or assets tied to the electric distribution system. Debt service payments on this outstanding principal total \$402 million through 2049. The City of Independence holds all this debt in its name and would require the permission of the bondholders prior to divesting the electric distribution system. The Omaha Public Power District, the Missouri Joint Municipal Electric Utility Commission, and the Missouri Development Finance Board are the bondholders the City of Independence would need to grant permission for divestiture or change in governance of IPL.

We reviewed all the outstanding obligations relating to IPL's ownership of generation assets to determine whether current revenues support its associated debt and long-term obligation servicing needs. In addition to IPL's operating, capital, and PILOT expenditures, the City has long-term obligations to pay its share of operations, maintenance, and fuel costs for power purchase agreements with OPPD for Nebraska City 2 and the Missouri Electric Commission for IATAN 2. As a result of its 12.3% ownership, it has these same obligations for the Dogwood Energy Center.

Additionally, the City has long-term power or capacity purchase agreements with Smokey Hills and Marshall Wind farms, MCP-Independence Solar, and Oneta.

After comparing the net present value of existing long term obligations with the net present value of IPL's annual average revenue over the term of the obligations, we found a modest surplus of \$6,400,649¹.

As a utility that is supposed to operate at breakeven, this surplus is less than 0.2% of total obligations and shows IPL is not running large long-term deficits or collecting excessive revenues. It also shows that the City of Independence is meeting its Charter obligation, which states:

¹ NPV calculated applying a 3% discount rate through 2049.

Section 3.17 of the City Charter:

“The electric utility shall not be operated for the benefit of other municipal functions, and shall not be used directly or indirectly as a general revenue producing agency for the City” ...” After providing for depreciation accruals and amortization of bonds, and for reasonable accumulation of surplus, the electric utility shall apply all annual profits to rate reductions.”

However, this high-level analysis does not make any assumptions about inflation or examine its effects. For this *status quo* condition to remain stable, IPL will require annual rate increases that match the annual electric utility industry inflation rate.

IPL has sufficient electrical capacity to meet today’s needs. However, to accommodate economic growth within the City and meet changing Southwest Power Pool (SPP) requirements, IPL needs to acquire additional electrical capacity in an increasingly competitive marketplace. Numerous studies dating back to the mid-2010s have identified this need, and the City responded through its 10-year contract with Oneta for 45 MW of firm capacity with an option for more capacity if desired. This need was also the catalyst for the proposed repowering of the Blue Valley site with pre-owned aero-derivative turbines.

The City Charter does not mention investing in the electric system to support the City's economic growth. The language “*for reasonable accumulation of surplus*” is open to interpretation and has been a point of contention that may account for deferring investments to support economic development.

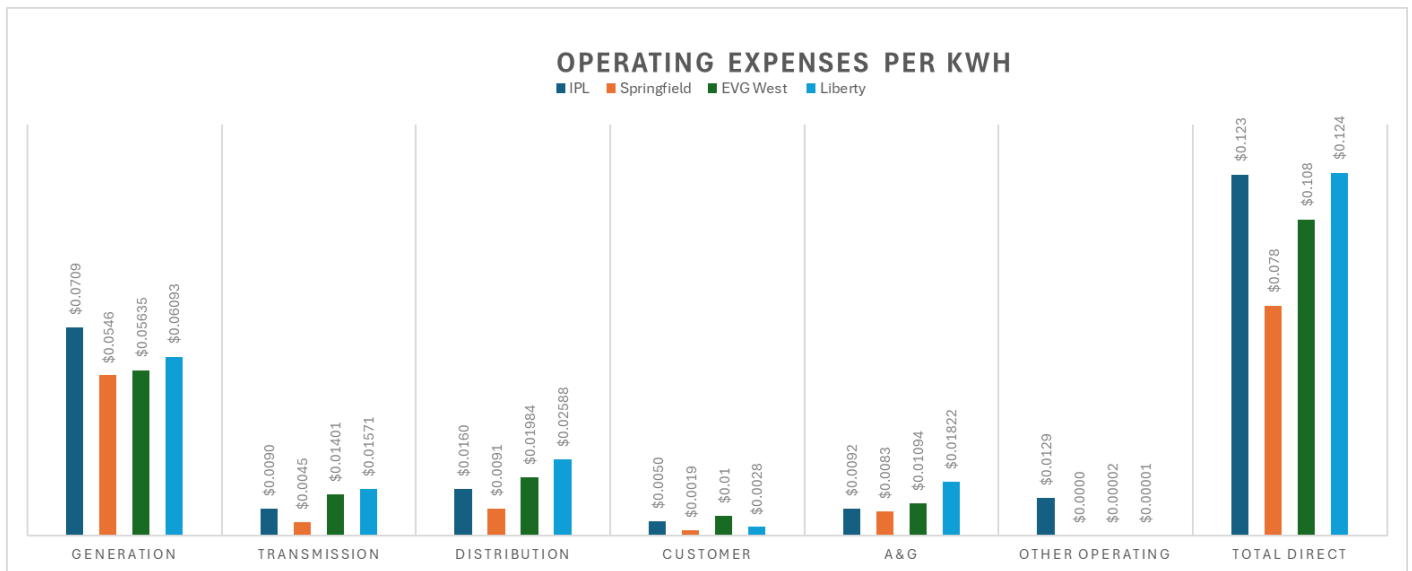
As described in further detail in the body of this report, DKMT believes the most significant risk the City faces is an early closure of Nebraska City 2 or IATAN 2 due to non-competitive economics. This risk is increased as proposed environmental regulations to constrain carbon emissions may require extensive capital investment by the end of this decade. Should this risk materialize, the City will find itself paying off debt on a prematurely retired coal-fired power plant while simultaneously searching for replacement capacity in an increasingly tight capacity market. This risk is not confined to IPL but affects all members of SPP.

Municipal utilities are typically more agile than regulated investor-owned utilities, and they should benefit from tax-free financing, quicker decision-making, and the ability to provide additional services to their communities. They can also more easily partner with other municipalities or private firms to finance energy projects. The recently enacted Inflation Reduction Act opened the opportunity for local governments to monetize tax credits from clean energy projects and receive the value of the tax credits as direct payments. Similarly, the Department of Energy’s Loan Program has numerous programs open to municipal governments to help finance energy projects with the benefit of federal loan guarantees.

IPL charges more for electricity than most other electric utilities in Missouri. Using a standard comparative measure of total sales revenue divided by kilowatt hours (kWh), we calculated IPL's 2023 revenue at 14.1 cents/kWh across all customer groups. The table below compares IPL with three other local utilities.

Year	Electric Utility	Revenues/kWh ²
2023	IPL	\$ 0.1410
2022	Springfield	\$ 0.1052
2022	Evergny Missouri West	\$ 0.1080
2022	Liberty	\$ 0.1316

IPL is an efficient utility. When direct operational costs are compared across these same utilities, IPL has lower costs per kilowatt-hour (kWh) in several categories. The notable exception is generation costs. One reason for the higher generation costs is the debt service payments for Nebraska City 2 and IATAN 2, which are included in purchased power costs. In the case of IATAN 2, this accounts for approximately 50% of the generation cost.



To determine how IPL revenue dollars are allocated, we separated debt service into interest and principal payments for all outstanding debt. We then allocated IPL revenue across major cost centers. When one compares the 4.09 cents/kWh for purchased power with the 7.09 cents/kWh shown in the above graphic, the impact of debt service costs is evident.

² IPL calculation uses FERC revenue shown in 2023 AFCR Table 20 and kWh in Exhibit 44

Category ³	Cents	Percentage of Total
Total Purchased Power Cost ⁴	4.09	28.986%
Distribution O&M	1.72	12.186%
PILOT	1.60	11.359%
Total Interest on Bonds	1.45	10.257%
Capital Investment	0.99	7.013%
Total Principal on Bonds	0.98	6.951%
Total Transmission O&M	0.97	6.878%
G & A	0.94	6.673%
CT O&M	0.72	5.082%
Customer Service	0.53	3.785%
Payroll Taxes	0.12	0.829%
Total	14.1	100.000%

For each IPL electric rate class, we estimated the materiality of a one-cent reduction in the cost of energy on a customer's bill. The table below shows the gross annual savings a customer might see if IPL were able to reduce the cost of energy by one cent per kilowatt-hour.

Customer Class	Number of Customers	Revenue	Total KWH	Rate Cents/KWh	Gross savings for one cent decrease in	Estimated Annual Savings for a one cent drop in energy costs per
City traffic signals	63	\$87,368	217,687	0.4013	\$2,177	\$35
Private security lighting	1,740	407,257	1,131,532	0.3599	11,315	\$7
Small general services	2,928	4,728,962	26,141,990	0.1809	261,420	\$89
Schools, churches, and hospitals, all electric	2	4,793	30,954	0.1548	310	\$155
Residential	53,603	79,210,982	536,615,127	0.1476	5,366,151	\$100
Schools, churches, and hospitals	201	1,317,583	9,184,034	0.1435	91,840	\$457
Large general services	1,612	36,167,893	266,306,331	0.1358	2,663,063	\$1,652
Sewer pumping	7	71,597	543,314	0.1318	5,433	\$776
Education	70	3,601,343	28,003,082	0.1286	280,031	\$4,000
Large general services – prime voltage	8	1,484,177	12,236,745	0.1213	122,367	\$15,296
Total electric general services	116	5,200,956	46,863,521	0.1110	468,635	\$4,040
Large power services	3	2,304,097	21,173,640	0.1088	211,736	\$70,579
Education, all electric	8	427,984	4,131,200	0.1036	41,312	\$5,164
Combined interruptible services	2	2,866,426	30,574,600	0.0938	305,746	\$152,873
Municipal - City (Buildings)	105	1,097,204	12,622,903	0.0869	126,229	\$1,202
General services – space heating	31	72,227	866,956	0.0833	8,670	\$280
Totals	60,499	\$139,050,849	996,643,616		\$9,966,436	

³ 2023 AFCR Data for cash based accounts

⁴ DKMT moved interest and principal payments to respective categories.

IPL currently employs 157 people and accounts for 40% of the City’s revenue⁵. The average annual payroll for IPL is approximately \$17 million, the majority of which is assumed to be spent locally. The impact of alternative IPL ownership on local spending is unknown.

IPL is a very reliable electric utility compared to its peers. The report's body provides a more detailed discussion of reliability. The impact of alternative ownership on the electric service quality within the City of Independence is unknown.

It is common for municipalities to compare the salaries of their electric utility workers with other city job classifications. While each municipality is unique, it is important to point out that there is a national shortage of electric utility line workers. Almost all electric utilities are looking to hire lineworkers. The reasons for this shortage are beyond the scope of this analysis. Still, the fact remains that the transformation of the electric utility sector is intensifying competition for skilled electric industry personnel. The table below shows the starting compensation levels for lineworkers near Independence, MO⁶.

Position	Company	State	Compensation
Lineman - Journeyman	Evergy	Missouri	\$53/hr
Lineman -Journeyman	Evergy	Kansas	\$49/hr
Lineman -Journeyman	Missouri Public Utility Alliance	Columbia, Missouri	\$99,000 per year

We estimate that other city departments would have to absorb approximately \$5 million in annual contributions and services IPL currently provides to the City. The City estimates that there is a \$38 million liability associated with healthcare for IPL employees that would have to be satisfied prior to transferring system ownership and a \$7 million liability associated with LAGERS funding for IPL employees that would need to be satisfied prior to a change in ownership.

There is also a \$25-50 million environmental liability associated with the cost to remediate the Blue Valley site, depending on the level of remediation required. The status of this liability is undetermined for an alternative ownership scenario.

In summary, *status quo* operations at IPL are not creating surplus funds or long-term deficits. However, for stable conditions to continue, the utility would need annual rate increases matching the annual electric utility industry inflation rate. Additionally, there is an urgent need for additional generation capacity to accommodate economic growth, changing SPP requirements, and as a hedge against early coal plant closures.

IPL provides a highly reliable level of service and is cost-efficient compared to other local utilities, apart from generation. IPL’s generation costs are higher than those of its peers, primarily due to debt service payments and the structure of the City’s debt.

⁵ AFCR page 18

⁶ Glassdoor 4 June 2024

Introduction

DKMT Consulting LLC was engaged to provide an independent analysis of the costs incurred and the benefits received from the City of Independence's ownership of Independence Power and Light. The purpose of this analysis is to inform decision-makers and stakeholders in their evaluation of alternative ownership options and governance models for IPL. This cost-benefit analysis was performed independently of a parallel strategic planning effort assessing various scenarios to optimize the performance of IPL for the benefit of the City of Independence and its citizens.

This cost-benefit discusses both qualitative and quantitative issues impacting the benefits associated with owning a municipal electric utility and the costs associated with operating and maintaining one. Decisions made as long as two decades ago, when the electric utility industry was much different than it is today, impact the flexibility the City of Independence has in evaluating its options.

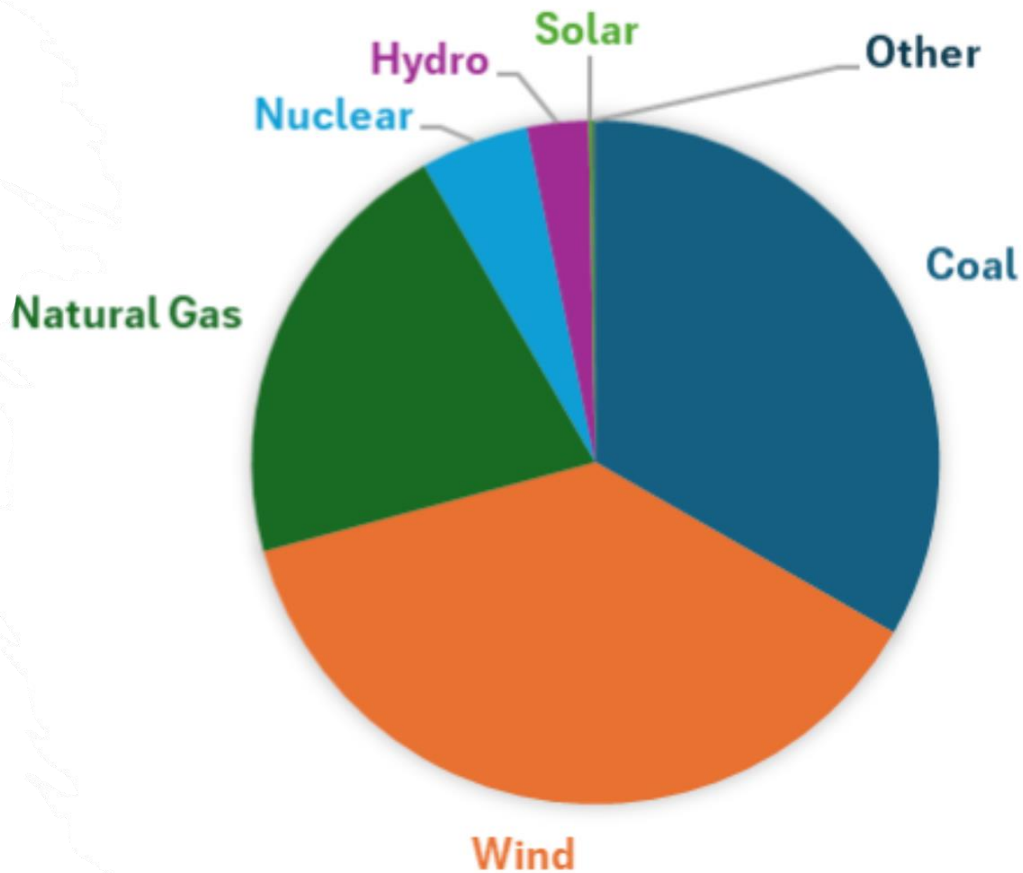
For example, the City must receive the consent of the Omaha Public Power District (OPPD), the Missouri Joint Municipal Electric Utility Commission (MJMEUC or MEC), and the Missouri Development Finance Board (MDFB) before changing IPL's ownership structure. This is because various bonds are tied to the revenues from the electric distribution system or tied to specific assets within the electric system. The tax-exempt nature of these bonds requires that they be paid off or that another tax-exempt entity assumes them, subject to the approval of the aforementioned organizations. The outstanding principal on IPL-related bonds in 2024 is approximately \$267 million. Debt service payments through 2049 total \$402 million.

Independence Power and Light (IPL) has served the City of Independence (the City) well since 1901. IPL has approximately 57,000 customers. In terms of customer numbers and revenues, IPL is one of the 100 largest municipal electric utilities in the country and is the second largest municipally owned electric utility in Missouri.

SPP Marketplace Characteristics

IPL is a member of the Southwest Power Pool (SPP) and owns a transmission system consisting of one 161 kV switching station, three 161/69 kV substations, 25 miles of 161 kV transmission lines, and 51 miles of 69 kV transmission lines. Membership in the SPP imposes obligations on IPL and the City regarding the maintenance of adequate financial reserves and of cybersecurity standards, meeting personnel training requirements, adhering to FERC accounting standards, and maintaining sufficient generating capacity to meet its electrical demand and reserve margin obligations. Benefits associated with SPP membership include the ability to purchase wholesale energy at the lowest possible cost and earn revenue through energy sales and ancillary services offered in the wholesale energy market. Wind is the dominant energy production source in SPP and sets a very low price for wholesale energy.

SPP ENERGY PRODUCTION 2022



Through its transmission ownership, IPL has generated an average annual revenue of approximately \$5.2 million in transmission congestion fees for the past five years (2019-2023)⁷. Transmission congestion fees account for differences in the transmission capacity between loads and generators. Under an alternative ownership scenario, the City of Independence would forfeit the PILOT fees it is currently collecting on this revenue.

The market design for the SPP ensures that generation plants that follow SPP dispatch instructions do not incur a financial loss for doing so. Put another way, SPP market prices cover the marginal costs of a generator to produce more energy to meet additional demand. SPP prices do not cover all costs of generation; only the marginal cost of producing the next kilowatt-hour as needed to meet market demand.

Generators that produce energy at a lower marginal cost are called upon more often than generators that produce energy at a higher marginal cost. The generator that is dispatched last to meet market needs is operating at breakeven, while more efficient generators have an opportunity to make money on the difference between their marginal cost and the last dispatched generator's

⁷ IPL supplied data.

marginal cost. It is essential to understand this fundamental market dynamic to evaluate the costs and benefits of owning electrical generation in the SPP marketplace.

The proliferation of low cost wind power in SPP has diminished the opportunities for thermal (gas, coal, oil) generators to participate in the wholesale energy marketplace.

While SPP does not have a capacity (MW) market, it does have a resource adequacy requirement for load-serving entities such as IPL. The only way to meet the capacity requirement is either to own a generating plant or to enter into a bilateral capacity contract with another power plant owner. IPL meets its SPP capacity obligations through its ownership of six General Electric (GE) Frame 5 combustion turbine generators (CTGs) and 12.3% of the Dogwood Energy Facility; through its participation agreements with Nebraska City and IATAN 2; and the capacity merit attributed to its Oneta and wind contracts. The table below shows the breakout of IPL’s accredited capacity.

<u>Generating Unit Characteristics</u>			
<u>City Owned and Operated Units</u>	Accredited Net	Year of Initial	<u>Fuel Type</u>
<u>Substation Generations – Combustion Turbine Units</u>	<u>Capacity (MW)</u>	<u>Operation</u>	
J-1 (Substation J)	12.3	1968	Oil
J-2 (Substation J)	13.3	1968	Oil
1-3 (Substation I)	17.2	1972	Oil
1-4 (Substation I)	15.8	1972	Oil
H- 5 (Substation H)	17.5	1972	Gas/Oil
H-6 (Substation H)	17.7	1974	Gas/Oil
Total IPL System (City Owned)	93.8		
<u>Jointly Owned Units</u>			
Dogwood Energy Facility	80.1	2001	Gas
<u>Contracted Resources</u>			
OPPD – Nebraska City Unit No. 2	57.6	2009	Coal
MEC – Iatan Unit No. 2	53.0	2010	Coal
Marshall Wind Farm	3.5	2016	Wind
Smoky Hills Wind Farm Phase 2	3.2	2008	Wind
MCP – Independence	n/a	2017	Solar
MCP – Independence II	n/a	2018	Solar
Oneta LLC	45.0	2002	Gas
Total Contracted Resources	162.3		
Total Accredited Capacity	336.2		

IPL’s capacity obligation is required to meet its total peak load plus a 16% reserve margin⁸. It currently meets this requirement and has an additional 7.87% capacity buffer. Should a new investment within the City of Independence raise its electrical demand by more than 15.4 MW, IPL would be forced to find a counterparty and enter into a contract for additional capacity at prevailing market pricing. Sufficiency of electrical capacity can be directly linked to the City’s economic

⁸ Currently 15% requirement increasing to 16% in 2026.

development opportunities. As uneconomic thermal generation plants are retired within the SPP footprint, contracting for additional capacity will become more expensive, and it will also be harder to find available resources. Capacity requirements also limit IPL’s flexibility to unilaterally retire generating units without building a new unit or contracting for additional capacity. This is an industry wide issue not just confined to IPL.

Year	Category	MW
2022	City of Independence Peak Demand	267
	SPP Reserve Requirement ⁹	1.16
	Required Capacity	309.72
	IPL Capacity Margin	107.87%

Generation Assets

Dogwood

Generation assets owned by the City of Independence include a 12.3% share of the Dogwood Generating Facility, a 643 MW combined cycle plant located in Pleasant Hill, Missouri. The City purchased its share of the plant for \$47,736,000 in 2012 (~\$596/KW). Bonds related to Dogwood and a 2012 infrastructure bond issue were combined and refinanced in 2022. There is currently \$69,415,000 in outstanding principal remaining on the bonds. Revenue from the electric system is pledged to the repayment of these revenue bonds. Dogwood provides 23.8% of IPL’s resource adequacy requirement.

Dogwood Operations¹⁰

Year	Capacity Factor	Busbar Cost
2023	44.4%	\$40.37
2022	31.4%	\$81.98
2021	31.2%	\$82.45
2020	37.7%	\$41.23

Energy Missouri West recently acquired a 22.2% interest (148MW) in the Dogwood plant for \$60,775,000 (~\$411/KW). In its docketed testimony, it stated the acquisition of Dogwood will provide the Company’s customers with steel-in-the-ground capacity and displace a portion of the Company’s capacity and energy needs that are served by the wholesale market, mitigating wholesale market risk and SPP resource adequacy requirements.

In general, contracted capacity agreements, such as IPL’s agreement with Oneta, are considered to have more risk than a physical plant because they have shorter terms and exposure to price

⁹ 16% is planned for 2026. 15% is current requirement.

¹⁰ MEC Annual Performance Reports

volatility and competition for renewal. IPL is currently observing price volatility in the marketplace as it looks for additional capacity.

GE Frame 5 Combustion Turbine Generators

IPL has six combustion turbine generators (CTGs) located in pairs at its substations, the combined capacity of which meets 27.9% of IPL’s resource adequacy requirement.

Unit	Fuel	Capacity (MW)
Substation J Unit 1	Fuel Oil	13
Substation J Unit 2	Fuel Oil	12
Substation I Unit 3	Fuel Oil	17
Substation I Unit 4	Fuel Oil	16
Substation H Unit 5	Fuel Oil and Natural Gas	17
Substation H Unit 6	Fuel Oil and Natural Gas	18

When SPP calls upon the CTGs to run (be dispatched), IPL receives full cost recovery for its marginal costs. SPP covers all fuel costs and variable O&M costs to operate the combustion turbines. CTG fixed costs are recovered separately through retail rates and have averaged approximately \$500K over the past three years.

IPL Combustion Turbine Fixed Costs	
Year	Actual Cost
2022	\$582,246
2023	\$431,929
2024 (projected)	\$459,102

The combustion turbines (CTs) are debt-free and have proven to have significant economic merit during major storms and periods of grid instability. Over the past four years, they have returned an average of \$6,759,044 in SPP credits. During the February 2021 Winter Storm Uri, the CTs produced approximately \$12.3 million in revenue credits for IPL to use in offsetting power purchases. In January of this year, the CTs produced approximately \$375,000 in revenue credits to use in offsetting IPL power purchases during an arctic cold snap. Incidents such as these highlight the risk mitigation value of diverse-fueled physical assets compared to relying on contractual arrangements. Despite being 40 years old, the combustion turbines have been vastly underused compared to others of the same vintage. GE recommends life extension maintenance should occur when the CTs have reached 5,000 starts or 200,000 of accumulated fired hours¹¹. Other inspections and maintenance occur at 1200 (HGP) and 2400 (MI) hours. While these inspections are expensive, the table below shows the years of successful operation in between these inspections.

¹¹ IPL 14 November H5 Turbine Repair presentation to City Council

Table 1 Years between Major Inspections

Date	Unit	S/N	Inspection Type	Fired Starts 04/30/2024	Fired Hours 04/30/2024	Years since outage	Starts per year	Years between HGP	Years between MI
11/14/2011	J-1	179344	Major	1585	4499	12.5	22	55	110
1/30/2012	J-2	17945	Major	2895	4108	12.3	20	60	120.1
11/12/2012	I-3	214425	HGP	1546	5389	11.5	25	47.5	94.9
11/5/2012	I-4	214426	HGP	1074	4609	11.5	24	50.3	100.6
6/15/2023	H-5	214427	Major	3045	24669	0.9	209	5.7	11.5
3/5/2019	H-6	226190	Major	2914	21241	5.2	118	10.1	20.3

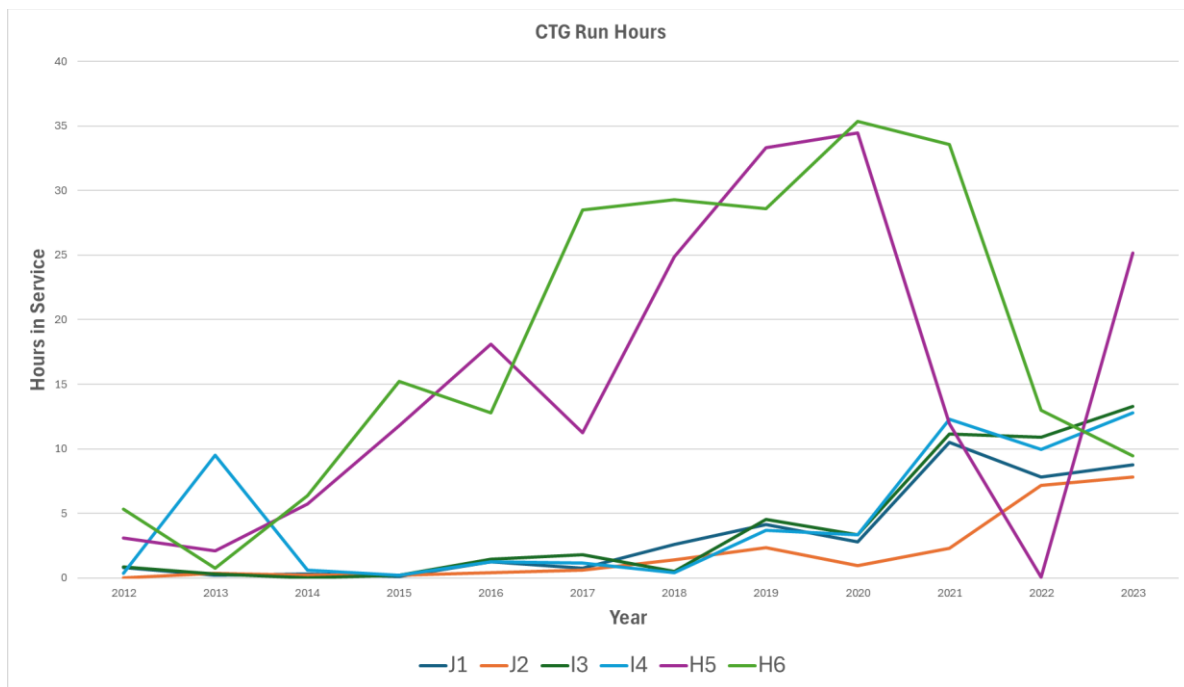


Figure 1 CT Service History

Additionally, as SPP’s aggregate load increases and its transmission system becomes increasingly constrained, the CTs are being called upon to run more often, as shown above, and are becoming more valuable to the City of Independence. The biggest issue with the CTs is the availability of replacement parts.

Power Participation Agreements

IATAN 2

In June 2006, the City of Independence entered into a unit power purchase agreement with Missouri Joint Municipal Electric Utility Commission (MJMEUC). Under this agreement, the City purchased a 50% share (approximately 53 MW) of MJMEUC’s 106 MW ownership share of the 875 MW IATAN 2 coal-fired generating unit located in Weston, Missouri.

MJMEUC issued tax-exempt bonds to pay for its share of the construction of the unit and the City of Independence is obligated to pay its share (50%) of the debt service on the bonds, the fixed

operation and maintenance costs, the variable operating costs including fuel, renewals and replacements of the unit and related administrative costs incurred by MJMEUC. The City of Independence may not engage in any transactions that compromise the tax-exempt nature of the bonds used to finance the MJMEUC portion of IATAN 2. This is important because only tax exempt entities may assume this debt, while a taxable entity may be required to pay off all debt and provide for future O&M contributions.

The unit began commercial operations on December 31, 2010. The term of the agreement is for the life of the plant. Per its agreement with MEC, the City *“may not sell, lease, or otherwise dispose of all or substantially all of its electric system, nor may it assign all or any part of its entitlements or interests under its Unit Power Purchase Agreement, except upon the **approval of MEC**, such approval not to be unreasonably withheld or delayed”*.

The City of Independence is required to make payments under the Unit Power Purchase Agreement *whether or not Iatan Unit 2 is operating or operable or its output is suspended, interrupted, interfered with, reduced or curtailed or terminated in whole or in part*.

The City of Independence portion of outstanding principal on the bonds related to IATAN 2 construction is \$86,502,500 through 2038. As currently structured, the debt service payments on this debt total \$118,906,860. IATAN 2 provides IPL with 15.8% (53 MW) of the capacity IPL requires to meet its resource adequacy requirements.

As alluded to in the SPP market description, the opportunity for coal-fired thermal generation to operate in the marketplace is being diminished by the increase in low-cost wind generation. This is one of the reasons for the annual decrease in IATAN 2’s capacity factor. Cheaper resources are displacing it from the marketplace. The capacity factor indicates the percentage of rated generation output the plant was able to produce. Busbar costs measure the plant’s cost to produce power and is one measure of a plant’s economic competitiveness.

IATAN 2 Historic Capacity Factors and Busbar Costs

Year	Capacity Factor	IPL Bus Bar Cost (\$/MWh)
2023	35.46% ¹²	\$114.72
2022	53.31%	\$71.53
2021	61.58%	\$60.60
2020	64.05%	\$60.94

For the City of Independence, this means that the plant will generate less revenue for debt repayment, and the City may need to increase its electric rates to help meet these debt obligations. Should the plant be retired before 2038, the same scenario plays out, with the unwelcome addition of a capacity shortfall and the need for IPL to contract for additional capacity in the marketplace. If the plant retires early, O&M and fuel costs will decrease substantially. IPL has averaged an annual payment of \$ 8.2 million for O&M, fuel, and administrative costs at IATAN 2 over the past five years. These cost reductions would partly mitigate the need for rate increases. However, there would be a

¹² Two forced outages and one prolonged scheduled outage in 2023, MEC 2024 Disclosure Report

slight shortfall, as debt service payments have averaged \$9.2 million over the past 5 years. There would also be a need to find 53 MW of replacement capacity.

Recently proposed EPA rules for CO₂ emissions from coal-fired power plants make the latter scenario very plausible. These proposed rules require coal plants operating beyond 2032 to substantially lower their carbon emissions.

Nebraska City 2 (NC2)

The NC2 unit is a 687-megawatt (MW) coal-fired generating station solely owned by OPPD. Similar to its agreement with MJMEUC, the City of Independence entered into a participation agreement with OPPD to construct the Nebraska City 2 power plant. Each Participation Agreement requires the Participant to pay its share of the costs of construction, financing, and operation of NC2, “and such *payment is due regardless of whether NC2 achieved or maintains commercial operation*”. The term of each Participation Agreement is 40 years following the commercial operation date of NC2 (May 2009), and a Participant may elect to renew its Participation Agreement after this initial term for additional periods up to the end of NC2’s operational life.

There are two outstanding bond issues for NC2: a 2015 series and a 2016 series. The City has a 32.65% share of the 2015A series debt and a 33.27% share of the 2016 debt. The City of Independence’s share of the total outstanding principal on NC2 bonds as of 2024 is \$63,835,378. Debt service on these bonds totals \$110,582,307 through 2049.

As with IATAN 2, the City pledged to charge and collect rates for electric power and energy to provide revenues sufficient to pay the cost of the following: operating expenses, 100% of aggregate debt service on all bonds the City issued to fund its NC2 participation agreements, and any other associated charges required to be paid out of revenues of the City’s electric system.

Low-cost wind generation is also impacting Nebraska City 2’s market participation, as can be seen by its decreasing annual capacity factors.

Nebraska City 2 Capacity Factor Trend

Year	Capacity Factor
2023	50.7%
2022	61.8%
2021	63.9%
2020	61.2%
2019	62.0%
2018	80.7%
2017	71.9%

As with IATAN 2, this means that the plant will generate less revenue for debt repayment. Should the plant be retired before 2049, there will be a capacity shortfall and the need for IPL to contract for additional capacity in the marketplace. If the plant retired early, O&M and fuel costs should

decrease substantially. IPL has averaged an annual payment of \$ 11.7 million for O&M, fuel, and administrative costs at NC2 over the past five years. These cost reductions would mitigate the need for rate increases as debt service payments have averaged only \$4.5 million over the past five years. IPL could potentially save money once the cost of 58 MW replacement capacity is determined.

Capacity and Power Purchase Agreements

Oneta

In May 2019, the City of Independence executed a capacity purchase agreement with Oneta Power, LLC for 45 MW of capacity with the option to increase its contracted capacity by 25 MW within the first five years of the contract. The term of the agreement is 10 years. The Oneta Energy Center is a 1,127 MW natural gas-fired combined cycle facility in Coweta, OK. The capacity price increases by a set amount each year. The current annual cost of capacity is approximately \$1.3 million. Discussions with Oneta have confirmed that the price of capacity has almost doubled since the 2019 contract was signed.

Smokey Hills Wind

In August 2008, the City of Independence executed a 20-year renewable energy purchase agreement with Smokey Hills Wind Project II, LLC for 15 MW. The project is in central Kansas. There are renewal options and the right to sell the City's share of the output to third parties. The non-dispatchable operational characteristics of wind power are the reason this contract is only accredited by SPP at 3.2 MW of capacity. The City pays approximately \$2 million annually for the energy from the project. The contract price is 4.5 cents per kWh.

Marshall Wind

In May 2015, the City entered into a renewable energy purchase agreement with Marshall Wind Energy LLC for 20 MW. The project is located in north central Kansas. The agreement runs through 2036 with certain renewal options and the right to sell the energy to others. The City pays approximately \$2.4 million annually for the energy from this project. The project is accredited by SPP for 3.5 MW. The contract price is 3.38 cents per kWh.

MCP Independence Solar

In November 2015 and July 2017, the City entered into renewable energy purchase agreements with MCP-Independence, LLC for solar power from a 3 MW farm and 8.5 MW expansion of that farm. The City is obligated to take all the energy produced by the solar farm for 25 years at a fixed price. The City pays approximately \$1.6 million annually for solar output.

The agreement expires in 2042 for the initial 3 MW and in 2043 for the 8.5 MW expansion. The City offers a community solar program for customers to subscribe to solar energy for a set fee of \$2.47 per solar unit (144 kWh). That portion of their energy bill is locked in for 15 years. 5.6 MW of the projects 11.5 MW capacity is subscribed. There are 203 residential and 96 commercial subscribers. The contract price is 8.15 cents per kWh.

Distribution System

IPL’s distribution system consists of approximately 564 circuit miles of 13 kV overhead lines and 233 circuit miles of 13 kV underground lines. Our team conducted a high-level visual inspection of the transmission and distribution system and found them to be well-maintained and robustly designed.

We estimate the replacement cost of the combined transmission and distribution system assets to be \$911,673,200. The Appendix provides a detailed breakdown of the system valuation.

SUMMARY	
Distribution System Total	\$ 656,275,177
Transmission System Total	255,398,023
GRAND TOTAL	\$ 911,673,200

The Replacement Cost New (RCN) reflects today’s cost to replicate the system in a greenfield environment. The review included making a best-effort attempt to assess the age of individual system components. Using this data, DKMT calculated a depreciation value for T&D equipment. Replacement Cost New Less Depreciation (RCNLD) can be used as an alternative for the current book value of the system. We calculated the RCNLD of IPL’s T&D System to be \$520,348,836.

2016D Leasehold Revenue Bonds

In 2016, the City issued \$47,180,000 of leasehold revenue bonds through the Missouri Development Finance Board. Since 2018, the city has made annual interest-only payments of \$1,789,994. The first principal payments will occur in 2038. The bonds established leaseholds on production, transmission, distribution, and general administration projects. Some of the equipment associated with the leaseholds has been retired. \$47,180,000 remains in outstanding principal.

Value of IPL Assets

Multiple methods exist for valuing an electric system, including an income approach, original cost less depreciation, replacement cost new less depreciation and value per customer. All these methods will provide a different range of values. Readers are cautioned that the value shown below does not represent a “sale price” for IPL. Based on estimated book values and a recent market transaction for similar assets, we approximate the value of IPL assets as shown below.

Asset	Estimated Value
Transmission and Distribution System	\$ 520,348,836
Machinery and Equipment ¹³	10,287,633
Dogwood Ownership ¹⁴	32,505,579
Combustion Turbines ¹⁵	38,518,126
General Plant and Other ¹⁶	11,442,452
NC2 Contract ¹⁷	23,652,922
IATAN 2 Contract ¹⁸	21,763,973
Oneta Contract ¹⁹	8,870,791
Wind Contract Capacity Value	518,670
Solar Capacity Value	0
Approximate Total Asset Value	\$ 667,908,982

There is currently \$266,932,878 in outstanding principal on bonds tied to revenues from or assets tied to the electric distribution system. Debt service payments on this outstanding principal total \$401,677,168 through 2049. The City of Independence holds all this debt in its name and would require the permission of the bondholders prior to divesting the electric distribution system. The Omaha Public Power District, the Missouri Joint Municipal Electric Utility Commission, and the Missouri Development Finance Board are the bondholders the City of Independence would need to grant permission for divestiture or change in governance of IPL.

We reviewed all of the outstanding obligations relating to IPL's ownership of generation assets to determine whether current revenues support its associated debt and long-term obligation servicing needs. In addition to IPL's operating, capital, and PILOT expenditures, the City has long-term obligations to pay its share of operations, maintenance, and fuel costs for power purchase agreements with OPPD for Nebraska City 2 and the Missouri Electric Commission for IATAN 2. As a result of its 12.3% ownership, it has these same obligations for the Dogwood Energy Center.

¹³ Independence 2023 AFCR Notes to financial records page 61.

¹⁴ Based on market value Evergy Missouri West paid for 22% of Dogwood in 2024

¹⁵ Based on the value in SPP Capacity Market Evergy Missouri West paid for Dogwood

¹⁶ City 2023 AFCR Records General Plan Depreciation Factor

¹⁷ NC2 Capacity times market value set by Evergy Missouri Dogwood Transaction

¹⁸ IATAN 2 Capacity times market value set by Evergy Missouri Dogwood Transaction

¹⁹ Remaining Contract net present value. Assume the price of contracted capacity has doubled since the contract origination and applied a [3] % discount rate to the calculation of present values.

Additionally, the City has long-term power or capacity purchase agreements with Smokey Hills and Marshall Wind farms, MCP-Independence Solar, and Oneta. The resulting financial obligations for the tenure of current contracts are summarized below.

Obligations	2024 Net Present Value of Obligations ²⁰
Debt Service	\$301,353,781 ²¹
O&M, Fuel, and other costs for NC2, IATAN 2, and Dogwood	433,129,116 ²²
PPA with Smokey Hills, Marshall Wind, MCP-Independence Solar and Oneta	501,270,398 ²³
IPL Current Operating Expenses, including capital investment and PILOT	1,232,676,592 ²⁴
Total Obligations	\$2,468,429,886

IPL currently has a 5-year annual average revenue of approximately \$138 million. The net present value of this revenue stream²⁵ is \$2,474,830,536 through 2049. The difference between the net present value of obligations versus revenue shows a modest NPV surplus of approximately \$6,400,649²⁶.

As a utility that is supposed to operate at breakeven, this surplus is less than 0.2% of total obligations, which shows that IPL is not running large long-term deficits or collecting excessive revenues.

Electric Reliability

Electric reliability, as discussed in this section, refers to the ability of the distribution system to consistently deliver electricity to consumers within accepted industry standards. Our discussion is limited to operational reliability, which ensures that the “lights stay on.” This includes IPL’s response to both planned and unplanned system interruptions while maintaining stability and continuity of service. Unplanned interruptions causing customer outages are most often due to storms (lightning), wind (vegetation), animals (squirrels), and equipment failure, along with a variety of other incidents (e.g., a car hits a pole).

Customer perception of reliable electric services is measured internally by the City of Independence through the 2023 City of Independence Resident Survey: Findings Report²⁷. 82% of residents responded that they were Satisfied or Very Satisfied with “Overall reliability of electrical service.”

²⁰ NPV calculated through 2049 applying a 3% discount rate.

²¹ NPV using 3% discount rate through end of obligations.

²² Used five-year average of expenses.

²³ Used five- year average of costs.

²⁴ Based on 2019-2023 AFCR data and City Finance provided capital spend 5 year average

²⁵ NPV calculated applying a [3] % discount rate.

²⁶ NPV calculated applying a 3% discount rate through 2049.

²⁷ 2023 City of Independence Resident Survey: Findings Report.

DKMT also asked all interviewees about their perception of electric reliability performance. Their common response was “reliability is good” with one customer stating that “IPL reliability is the best I have ever had.”

In the United States, electric reliability is determined through several measures which are defined by IEEE Standard 1366 – Reliability Indices²⁸. We focused on three of these measurements:

1. **SAIFI (System Average Interruption Frequency Index):** This measure, which provides insight into the frequency of outages, defines how often the average utility customer experiences an interruption. For example, an annual SAIFI of 1.00 would mean that the average customer would see one outage a year while a SAIFI of 0.25 would mean only 25% of customers would experience one outage a year. A SAIFI greater than 1.00 would mean that the average customer would experience more than one outage per year.
2. **CAIDI (Customer Average Interruption Duration Index):** CAIDI measures the average time, in minutes, required to restore service after an interruption. Practically, it provides insight into how long it takes to restore customers who actually have the outage (not the “average” customer). Technically, the outage duration starts from the time of the interruption (not when the outage is called into the utility) until the customers power is restored.
3. **ASAI (Average Service Availability Index):** Sometimes called the service reliability index, ASAI is the ratio of the number of hours (per month) where service is provided over the total number of hours per month (about 730 hours per month).

A utility captures information about interruptions and outages either manually or automatically. A brief overview of both methods is provided to help you better understand IPL reliability statistics.

Advanced metering infrastructure (AMI)

AMI meters, sensing the loss of power, automatically report outages as soon as the interruption occurs. The report is “timestamped” so that, even if there is a delay in the utility receiving the report, the actual start time is captured. In addition, when the power is restored, the AMI meter reports the time of the restoration. A part of the AMI system is Meter Data Management (MDM). MDM removes all manual work associated with outage reporting. In addition, the MDM is directly connected to an Outage Management System (OMS), which, based on meter reports, estimates the place(s) where the interruption occurred. In addition, the OMS will automatically create and send a work order to the field journeymen to initiate restoration. Once field personnel determine the cause of the interruption (lightning strike, car hitting a pole, etc.), the OMS provides an estimated time for restoration, which is typically shared with the customer.

IPL reporting of customer outages

IPL does not have an AMI system; it manually captures customer outage information in two primary ways.

1. Customers call the dedicated IPL outage number (816) 325-7550). This number, which is the best outage reporting method, allows direct transfer of significant customer information to IPL’s OMS.

²⁸ <https://site.ieee.org/boston-pes/files/2019/03/IEEE-1366-Reliability-Indices-2-2019.pdf>

2. Customers call the City of Independence’s Customer Service call center. This method requires manual intervention of a customer service representative to provide information which can delay OMS notification.

In addition to the manual nature of IPL outage reporting, the IPL process suffers challenges caused by inaccurate information relating the caller ID to the service address. Customers are required to call the Customer Service department to update information regarding the phone number assigned to the service address. During 2023, an average of 71% of calls coming into the OMS were “unresolved” (e.g., could not assign a service address of the outage. This significantly slows down the process of accurate and timely identification of the location of the interruption causing the outage(s).

DKMT understands how this has occurred at IPL and finds the same problems at other non-AMI utilities. We believe it would be difficult to develop and maintain a database correctly relating service locations to customer telephone numbers without significant effort and likely with the need for additional customer service resources.

Additionally, the current IPL outage reporting process adds significant uncertainty to when the outage begins and when it ends, as it is dependent on the linemen finding the interruption location, working to restore power, and then manually closing out the work order. Suppose the outage is at night during a severe storm. In that case, the lineman is focused on working safely and restoring as many customers as possible, not on the timely and accurate manual notification of a single restoration work order.

AMI removes the location constraint since the meter is assigned to a unique service address. Therefore, when reporting an outage, the OMS knows the exact location of the outage. In addition, all AMI meters impacted by the interruption concurrently report outages. This makes for an easier OMS solution to the problem's location.

SAIFI performance

As stated earlier, the System Average Interruption Frequency Index measures how often the average utility customer experiences an interruption. DKMT performed an analysis of IPL monthly customer and outage data for fiscal year (FY) 2019 through FY2024 (February). The outage data did not include major event (ME) days²⁹. Because IPL provided our team with monthly data, we were able to estimate calendar year (CY) SAIFI as shown in Table 2 below.

Table 2 - Estimated IPL SAIFI w/o ME Days

CY2019	CY2020	CY2021	CY2022	CY2023
0.034	0.029	0.053	0.024	0.031

²⁹ [IEEE defines Major Event Days](#) (MEDs) through a statistical analysis using daily calculated System Average Interruption Duration Index (SAIDI). While the link provides a good, detailed discussion of the MED methodology, MEDs “... represent those events of such a reliability magnitude that a crisis mode of operation is required to adequately respond.” Practically, think of an ME day as one which results from a very severe thunderstorm or ice storm impacting IPL customers.

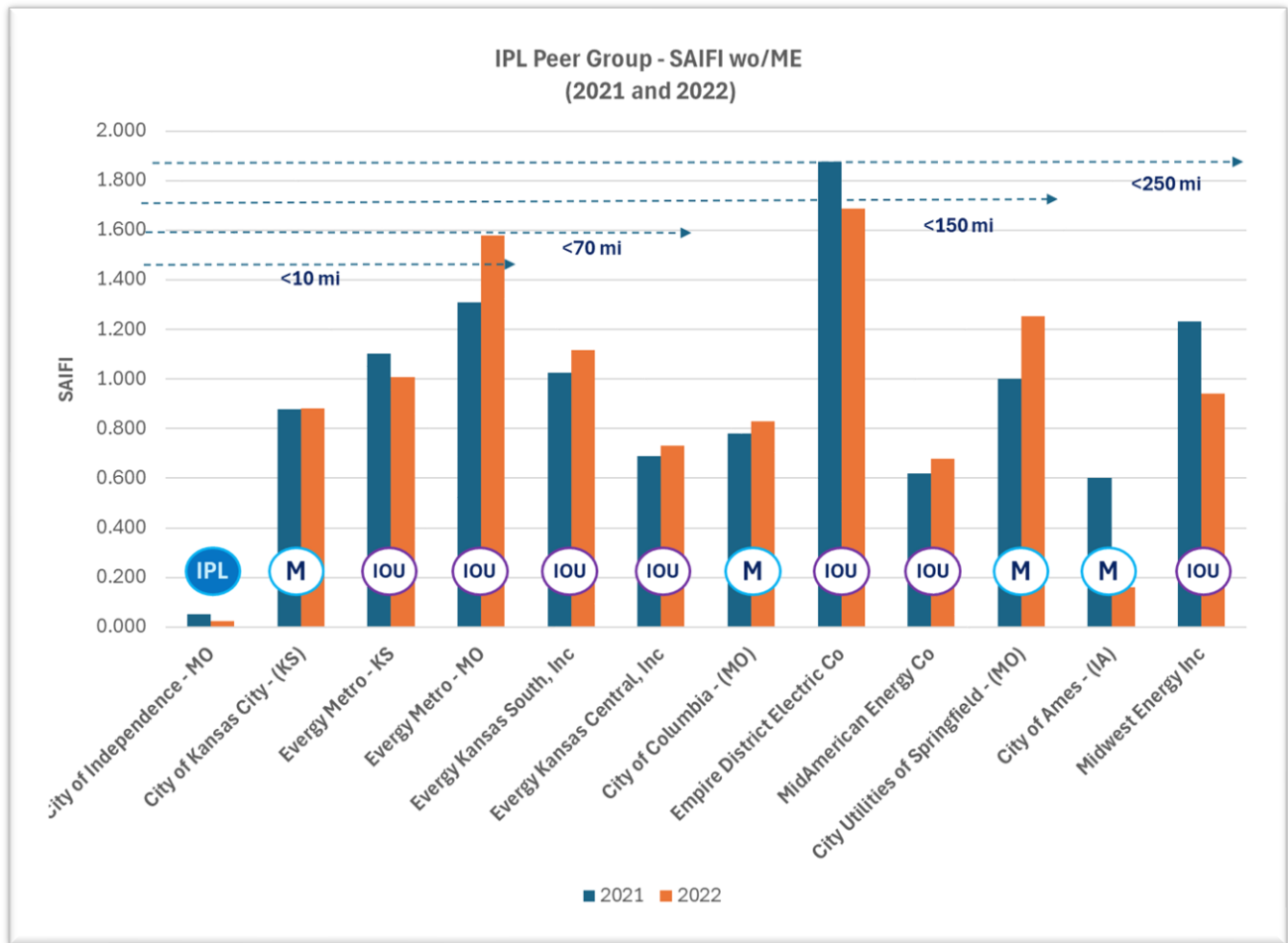
The five-year average IPL SAIFI is 0.034. This means, on average, less than 4% of IPL customers experienced an outage, for non-Major Event days, each year between 2019 and 2023. As a benchmark, first quartile 2022 IEEE SAIFI performance was 0.84³⁰. Therefore, even if there are significant challenges with data quality because of IPL's outage processes, IPL's SAIFI performance is extremely good.

DKMT also developed a more localized benchmark peer group from cooperatives, investor owned, and municipal utilities located in IA, KS, and MO (within 250 miles of the City of Independence), with greater than or equal to 25,000 customers, and who reported SAIFI performance from 2019 through 2022 to the US Energy Information Administration. EIA Form-861 data³¹ is reported on a calendar year basis, and so DKMT estimated calendar year SAIFI based on month-by-month customer counts and outage data.

As shown below, IPL SAIFI performance is the best in the peer group. Again, because of potential uncertainty of outage data due to the non-AMI OMS process, doubling or tripling the SAIFI performance would not change IPL's best in peer performance.

³⁰ [IEEE Benchmark Year 2023 Results for 2022 Data, 2023 Distribution Reliability Working Group Meeting, July 19, 2023, Orlando, FL.](#)

³¹ [Annual Electric Power Industry Report, Form EIA-861.](#)



IPL Reliability Peer Group CY 2021 and CY 2022 Average Interruption Frequency (SAIFI) performance.

CAIDI performance

DKMT reviewed IPL Customer Average Interruption Duration Index (CAIDI) performance between FY2019 and FY2023. We note that IPL internally reports CAIDI performance on a monthly basis for the fiscal year from July 1 through June 30. We did not estimate calendar year end CAIDI as we believe the month over month data provides adequate insight into IPL’s CAIDI performance.

The figure below shows a surface graph of IPL’s CAIDI performance month by month between FY2019 and FY2023. We note that there is a high variability in CAIDI, which is due to severe weather events. For the five-year period, the monthly average CAIDI was 98.58 minutes. During this same period, there are four monthly average CAIDI indices greater than 150 minutes. These occur when expected (spring, late-summer, and January/ February).

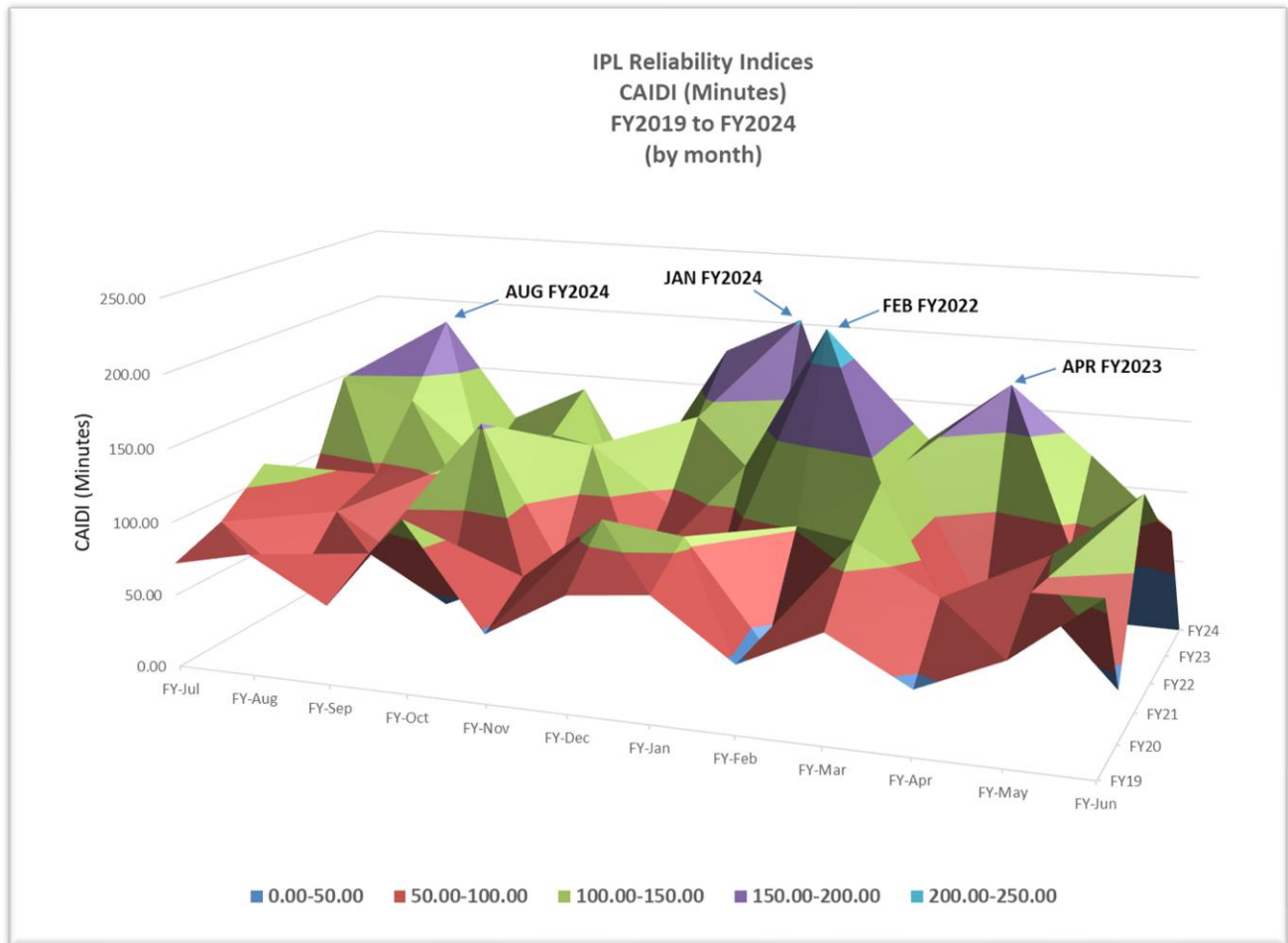


Figure x - IPL CAIDI FY-2019 through (FY2024(FEB))

ASAI performance

Finally, we reviewed IPL’s Average Service Availability Index (ASAI) during the fiscal five-year period of FY2019 through FY2024. The overall average “up time” for the distribution system was 99.994% with a low of 99.982% and a high of 100%.

IPL distribution infrastructure and reliability

DKMT assessed the overall material condition of IPL’s distribution infrastructure through direct expert observation by both a journeyman/lineman and an electrical engineer. In the judgement of the assessment team, they observed no indications that the system could not support the internally reported reliability performance.

DKMT concludes, as developed through customer interviews, City of Independence community surveys, analysis of both IPL internal and external reliability data, and our qualitative assessment of the distribution infrastructure, that IPL electric reliability is found to be very good.

Rates

Comparisons of electric rates and electric bills are easy to misinterpret and can lead to misunderstandings that are hard to correct. In general, customers are only concerned with their total bill and look for ways to reduce it.

A utility needs to recover all its operating and debt service costs and fund a reasonable operational reserve fund. This is called its revenue requirement. IPL has an annual revenue requirement of approximately \$140 million.

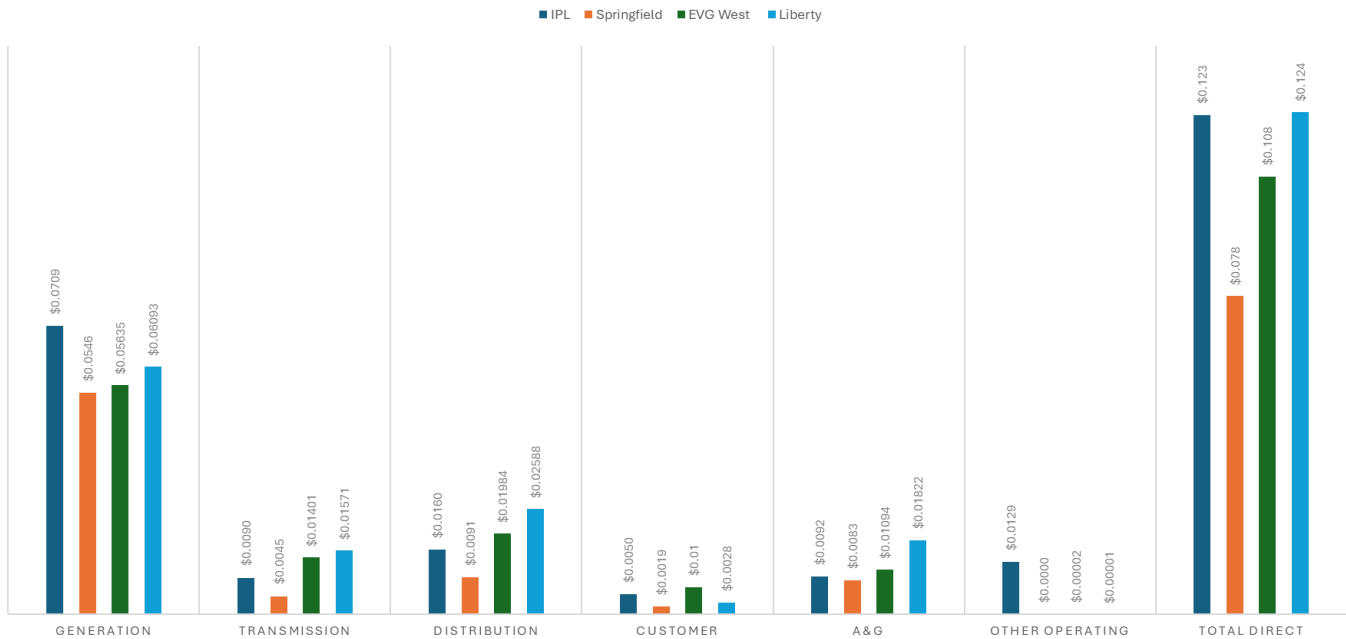
It is common practice among electric utilities to divide their customers into various groups based on the characteristics of their electrical load. For example, residential customers have load characteristics that are different from those of large commercial and industrial customers. The City of Independence and IPL develop electric rates for each group of customers to recover all the costs of providing electric service to IPL's customers. Municipally owned utilities have the flexibility to change their customer groupings and electric rates anytime the City Council thinks it is appropriate. Utilities regulated by the Missouri Public Utilities Commission can only change electric rates and customer groupings through regulatory proceedings that can last months or years to complete.

In terms of operational efficiency, IPL compares well with other utilities for operating expenses per kWh across most electric utility activities, apart from generation costs, as shown in the figure below. The City's 2023 APCR shows that it paid \$53.99/MWh for power from NC2, \$77.45/MWh for power from IATAN 2, \$67.76/MWh from Dogwood³², \$33.64/MWh for power from the Marshall Wind Energy Center, \$32.54/MWh for power from the Smokey Hills wind farm and \$75.96/MWh for energy from the MCP-Independence solar farm. As previously mentioned, IPL's fixed cost for the CTGs is approximately \$500,000 annually. Whenever the CTGs are dispatched, IPL is made whole on all costs associated with the CTGs while they are operating, as it is with Dogwood, IATAN 2, and NC 2.

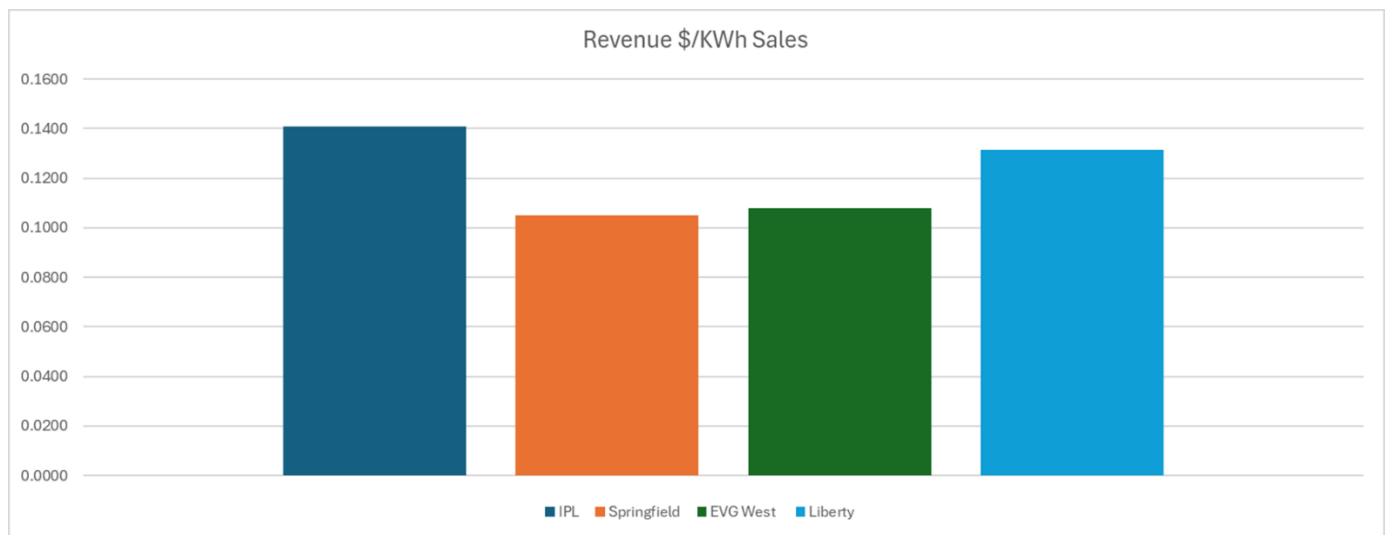
On average, debt service on outstanding bonds made up 28.24% (\$15.24/MWh) of NC2's cost, 51% (\$39.56/MWh) of IATAN 2's cost, and 41% (\$27.63/MWh) of Dogwood's cost. Debt Service payments are one reason IPL generation costs are higher than those of other comparable utilities.

³² DKMT Calc temp

OPERATING EXPENSES PER KWH



Differences in various policies make it difficult to compare electric rates across investor-owned and municipally owned electric utilities. One point of comparison is a utility's total sales revenue versus its sales volume, which shows how much a utility is charging for power across all customer classes.

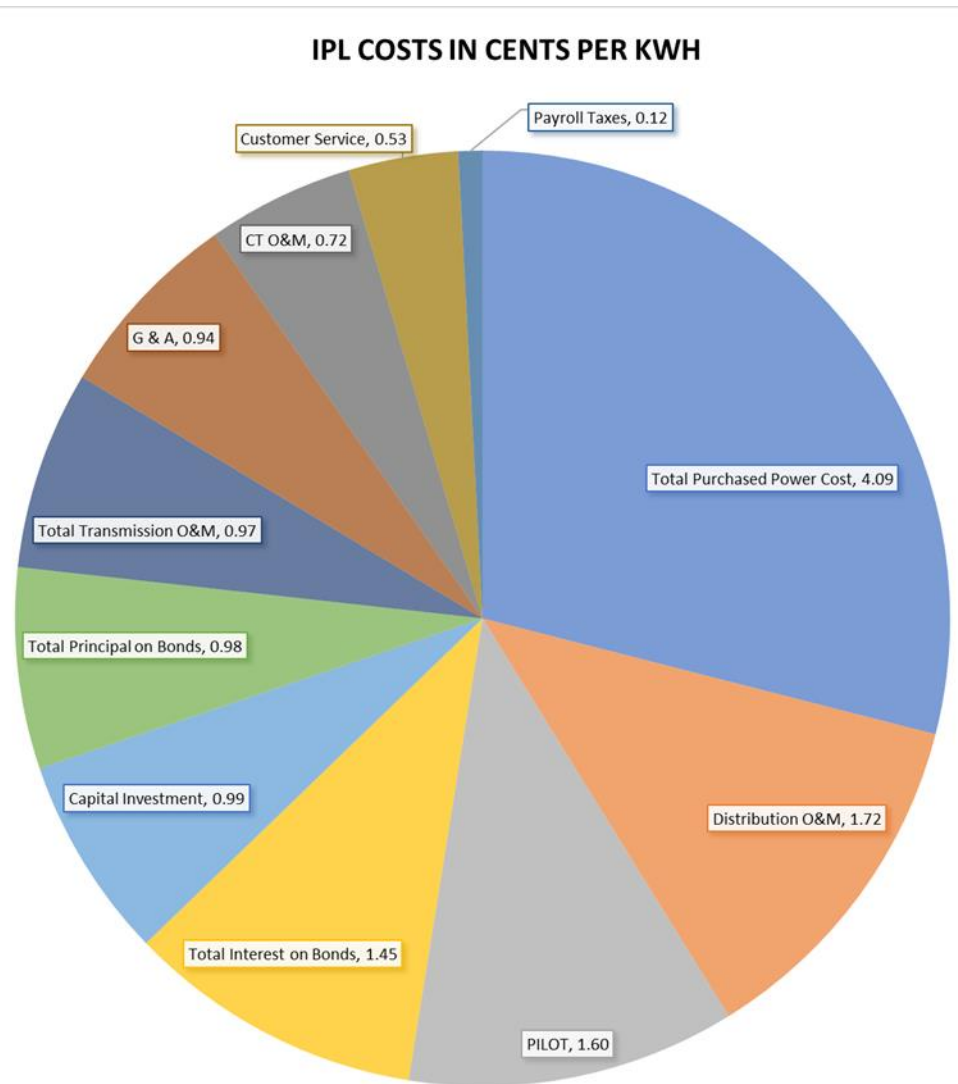


IPL charges more for power than City Utilities of Springfield, Evergy Missouri West, and Liberty Utilities. For a municipally owned utility, such as IPL, the difference between the operating costs and the revenue received reflects debt service payments, payments in lieu of taxes (PILOT), and other miscellaneous charges.

Data Year	Utility	Revenues/kWh ³³
2023	IPL	0.1410
2022	Springfield	0.1052
2022	EVG West	0.1080
2022	Liberty	0.1316

Identifying the inputs into IPL’s electric costs shows how ratepayer funds are broken down by major cost category.

The pie chart and the table below show the relative contribution of each cost category that makes up IPL’s electric rates.



³³ IPL calculation uses FERC revenue shown in 2023 APCR Table 20 and kWh in Exhibit 44

The table shown below breaks out the relative cost of each major expense category IPL ratepayers pay for one kilowatt-hour (kWh) of electricity:

Category³⁴	Cents	Percentage of Total
Total Purchased Power Cost ³⁵	4.09	28.986%
Distribution O&M	1.72	12.186%
PILOT	1.60	11.359%
Total Interest on Bonds	1.45	10.257%
Capital Investment	0.99	7.013%
Total Principal on Bonds	0.98	6.951%
Total Transmission O&M	0.97	6.878%
G & A	0.94	6.673%
CT O&M	0.72	5.082%
Customer Service	0.53	3.785%
Payroll Taxes	0.12	0.829%
Total	14.1	100.000%

Services IPL provides and receives from City Departments

IPL has been an integral part of the City since its founding in 1901. Its operations are intertwined with various other departments that provide services to and receive services from IPL.

These services include:

- IPL paid the water department \$2,451,852 for customer service support services and telephone operators in fiscal 2023.
- IPL pays Finance and Administration \$2,893,851 for various support services such as HR, Tech Services, and Finance support.
- IPL provides communication transport services for all city facilities (40 locations), Independence School District (42 locations), and Blue Springs School District (4 locations). The total annual budget for these services is approximately \$800,000 and is paid for through a combination of electric rates, school district reimbursements (\$230K), and city facility connection charges.
- The water and sewer utilities paid IPL \$2,092,268 for meter reading services in fiscal year 2023.

³⁴ 2023 AF CR cash based accounts

³⁵ DKMT shifted interest and principal to respective categories.

- IPL maintains the traffic signals for 78 intersections throughout the city at an annual cost of approximately \$435,000.
- IPL maintains 58 school crossing signals for the Independence, Fort Osage, and Blue Springs school districts at an annual cost of approximately \$68,000.
- IPL maintains the streetlights throughout the city at an annual cost of approximately \$350,000.
- IPL personnel also provide miscellaneous support, such as assisting the water and sewer treatment plants with electrical distribution system repairs, supporting the police department with camera installation and removal, and supporting the annual Santa-Cali-Gon.

Should the City decide to divest itself of IPL, we estimate that approximately \$5 million in remaining costs would need to be shifted to other City departments to maintain the current level of service provided by IPL for these services.

The City estimates that a \$38,372,844 liability associated with healthcare for IPL employees would have to be satisfied prior to transferring system ownership and a \$7,291,922 liability associated with LAGERS funding for IPL employees would have to be satisfied prior to a change in ownership.

The table below shows the current level of IPL contributions and reimbursement for various services and the estimated amounts the City would need to reallocate to other departments to maintain the same level of service.

Activity	IPL Current Transfers/Support	Remaining Percentage or Change	Reallocation to other City Departments
IPL pays water for customer service	\$ 2,451,852	25%	\$ 612,963
IPL Pays F&A for support	2,893,851	30%	868,155
Communication Support -Fiber	800,000	100%	800,000
IPL receives funds for meter reading	(2,092,268)	-50%	1,046,134
Traffic Signal Maintenance	435,000	100%	435,000
School Crossing Signal Maintenance	68,000	100%	68,000
Streetlight Maintenance	350,000	100%	350,000
General Fund Contribution	1,168,553	100%	1,168,553
School District Reimbursement for fibe	(230,000)	100%	(230,000)
	5,844,988		\$ 5,118,805

There is also a \$25-50 million environmental liability associated with the cost to remediate the Blue Valley site, depending on the level of remediation required. The status of this liability is undetermined for an alternative ownership scenario.

IPL currently employs 157 people and accounts for 40% of the City’s revenue³⁶. The average annual payroll for IPL is approximately \$17 million, the majority of which is assumed to be spent locally. The impact of alternative IPL ownership on local spending is unknown.

It is common for municipalities to compare the salaries of their electric utility workers with other city job classifications. While each municipality is unique, it is important to point out that there is a national shortage of electric utility line workers. Almost all electric utilities are looking to hire lineworkers. The reasons for this shortage are beyond the scope of this analysis. Still, the fact remains that the transformation of the electric utility sector is intensifying competition for skilled electric industry personnel. The table below shows the starting compensation levels for lineworkers near Independence, MO³⁷.

Position	Company	State	Compensation
Lineman - Journeyman	Evergy	Missouri	\$53/hr
Lineman -Journeyman	Evergy	Kansas	\$49/hr
Lineman -Journeyman	Missouri Public Utility Alliance	Columbia, Missouri	\$99,000 per year

³⁶ AFCR page 18

³⁷ Glassdoor 4 June 2024

Impact of Rate Reductions

For each IPL electric rate class, the materiality of a one-cent reduction in the cost of energy will have a different impact on a customer’s bill due to charges unrelated to energy use. Using data found in Table 20 of the 2023 City of Independence AFCR, DKMT estimated the gross annual savings a customer might see if IPL were able to reduce the cost of energy by one cent per kilowatt-hr.

Customer Class	Number of Customers	Revenue	Total KWH	Rate Cents/KWh	Gross savings for one cent decrease in	Estimated Annual Savings for a one cent drop in energy costs per
City traffic signals	63	\$87,368	217,687	0.4013	\$2,177	\$35
Private security lighting	1,740	407,257	1,131,532	0.3599	11,315	\$7
Small general services	2,928	4,728,962	26,141,990	0.1809	261,420	\$89
Schools, churches, and hospitals, all electric	2	4,793	30,954	0.1548	310	\$155
Residential	53,603	79,210,982	536,615,127	0.1476	5,366,151	\$100
Schools, churches, and hospitals	201	1,317,583	9,184,034	0.1435	91,840	\$457
Large general services	1,612	36,167,893	266,306,331	0.1358	2,663,063	\$1,652
Sewer pumping	7	71,597	543,314	0.1318	5,433	\$776
Education	70	3,601,343	28,003,082	0.1286	280,031	\$4,000
Large general services – prime voltage	8	1,484,177	12,236,745	0.1213	122,367	\$15,296
Total electric general services	116	5,200,956	46,863,521	0.1110	468,635	\$4,040
Large power services	3	2,304,097	21,173,640	0.1088	211,736	\$70,579
Education, all electric	8	427,984	4,131,200	0.1036	41,312	\$5,164
Combined interruptible services	2	2,866,426	30,574,600	0.0938	305,746	\$152,873
Municipal - City (Buildings)	105	1,097,204	12,622,903	0.0869	126,229	\$1,202
General services – space heating	31	72,227	866,956	0.0833	8,670	\$280
Totals	60,499	\$139,050,849	996,643,616		\$9,966,436	

As expected, the impact of a reduction in energy costs is greater on customers with higher energy usage. The cumulative effect on the City is a reduction in gross revenues of approximately \$10 million, and a corresponding reduction in PILOT and sales tax of approximately \$1 million. This relationship holds for all electricity suppliers to the city and its ratepayers. Other municipalities take advantage of the flexibility inherent in municipal utility ownership to develop economic development packages that increase the sales tax and property tax base to offset reductions in franchise fees and PILOT revenues.

In summary, *status quo* operations at IPL are not creating surplus funds or long-term deficits. However, for stable conditions to continue, the utility would need annual rate increases matching the annual electric utility industry inflation rate. Additionally, there is an urgent need for additional generation capacity to accommodate economic growth, changing SPP requirements, and as a hedge against early coal plant closures.

IPL provides a highly reliable level of service and is cost-efficient compared to other local utilities, with the exception of generation. IPL’s generation costs are higher than those of its peers, primarily due to debt service payments and the structure of its debt.