City of Pittsburg, Kansas Municipalization Preliminary Feasibility Study

July 2019

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TABLE OF CONTENTS

TABLE OF FIGURES

DEFINED TERMS

APPA	American Public Power Association
City	City of Pittsburg, Kansas
Commission	Kansas's Public Utilities Commission
Concentric	Concentric Energy Advisors, Inc.
EPA	United States Environmental Protection Agency
Evergy	Parent company to Westar Energy, Inc. and Great Plains Energy (parent company of Kansas City Power & Light)
FERC	Federal Energy Regulatory Commission
JPUD	Jefferson County Public Utility District No. 1
KCC	Kansas Corporation Commission
KCP&L	Kansas City Power and Light Company
K.S.A.	Kansas Statutes Annotated
LIPA	Long Island Power Authority
MWh	Megawatt-hour
NEM	Net Energy Metering
NPV	Net Present Value
OPPD	Omaha Public Power District
O&M	Operations and Maintenance
PSE	Puget Sound Energy
PUD	Public Utility District
RCNLD	Reproduction Cost New Less Depreciation
RCN	Reproduction Cost New
RFP	Request For Proposals
SPP	Southwest Power Pool
Westar	Westar Energy, Inc.
Xcel	Xcel Energy Inc.

QUALIFICATIONS

Concentric Energy Advisors, Inc. ("Concentric") is a management consulting and financial advisory firm focused on the North American energy industry. Concentric has offices in Marlborough, Massachusetts and Washington, D.C., and specializes in utility regulation, energy markets, finance, mergers and acquisitions, valuation, management operations and planning, as well as civil litigation and alternative dispute resolution. Neither Concentric nor any of its employees have any present or contemplated future interest in the assets appraised in this report. Neither our engagement by Evergy[1] nor our compensation is in any way contingent upon the value estimates contained in this report.

This report was prepared under the direction of Ann E. Bulkley, Senior Vice President, of Concentric. Ms. Bulkley is a certified general appraiser licensed in the Commonwealth of Massachusetts and the state of New Hampshire. Ms. Bulkley has more than two decades of management and economic consulting experience in the energy industry. Ms. Bulkley has directed and supported numerous valuations of public utility and industrial properties for ratemaking, purchase and sale considerations, ad valorem tax assessments, and other accounting and financing matters. These valuations require expertise in utility finance and regulation, electricity and natural gas markets, and utility risk assessment. Prior to joining Concentric, Ms. Bulkley held senior expertise-based consulting positions at several firms, including Reed Consulting Group and Navigant Consulting, Inc., where she specialized in valuation. Ms. Bulkley holds an M.A. in economics from Boston University and a B.A. in economics and finance from Simmons College.

All statements, assumptions, opinions, positions, and conclusions set forth in this Preliminary Feasibility Study are solely and exclusively provided by and attributable to Concentric and to no other party whatsoever. Concentric is solely responsible for the contents of this Preliminary Feasibility Study. Nothing in this Preliminary Feasibility Study is intended, nor shall be construed, to be information, admissions, statements, assumptions, opinions, positions, or conclusions made or provided by or on behalf of Evergy.

1 Westar and Great Plains Energy merged in 2018 to become Evergy, so Concentric included information on both Westar and Great Plains Energy's subsidiary, Kansas City Power and Light ("KCP&L"), where relevant.

EXECUTIVE SUMMARY

Concentric has performed a preliminary independent assessment of the costs and implications of the City of Pittsburg, Kansas ("City") acquiring Evergy's existing utility assets within the City and assuming responsibility for providing electric service to Evergy's existing customers in the City ("Preliminary Feasibility Study").[2] The Preliminary Feasibility Study presents facts and industry insights to be considered and evaluated by the primary stakeholders in the City regarding the choice between the City establishing a new municipal electric utility and providing municipal electric service ("City Option") or Evergy continuing to provide electric service to its customers within the City ("Evergy Option"). The analysis herein identifies and estimates the costs that would be incurred by the City if it were to pursue municipalization and provides a comparison of the projected future rates under the City Option versus the Evergy Option. In addition, the Preliminary Feasibility Study provides a discussion of the services that are currently provided by Evergy that may be provided by the City, as well as other factors that should be considered in evaluating the City Option.

It is important to understand the process by which a municipality can acquire utility property in the State of Kansas. Under the Kansas Constitution,[3] municipalities are allowed to take ownership of utility property, either through purchasing the property or through a condemnation proceeding. For purposes of the analysis herein, it is assumed that if municipalization of the electric distribution system in the City occurs, it would be effectuated through condemnation. The decision to municipalize requires an affirmative vote in a city election. If there is support for municipalization through that election, the municipality is then required to submit a petition to the Kansas Corporation Commission ("KCC") for a certificate to municipalize the electric utility. However, if the utility objects to the sale of the assets, the KCC will then open a condemnation proceeding under its eminent domain legislation in which the municipality must provide a notice of intent to purchase the assets and conduct an appraisal of the property to be acquired. The municipality must file a petition for condemnation to which the utility can respond challenging the right to condemn. If challenged, the KCC will conduct a condemnation proceeding to determine whether or not to grant the condemnation of the utility property and to determine the valuation of the utility's assets that would be acquired. The asset valuation accounts for the value of the utility's assets, as well as other related costs, including any stranded assets, separation and reintegration costs, and loss of future revenue.

In the case of Pittsburg, the determination as to whether to condemn the utility property within the City should be informed by an analysis of projected customer rates under the City Option versus the Evergy Option. It is critical that this type of analysis be an apples-to-apples comparison between the two alternatives. The key determinants of the rates that customers can expect to pay are shown in Figure ES-1.

[2] It will be appropriate to update this assessment and any subsequent formal valuation studies as new information becomes available that will have a meaningful impact on the results.

[3] See Kansas Statutes Annotated ("K.S.A.") 66-1,176b, 66-1,176c, and 12-811, as well as K.S.A. 26-501 through 26-519.

City Option: The electric rates under this option reflect the cost to the City of acquiring Evergy's utility property within the City, including the costs related to the municipalization effort prior to acquiring the electric utility, *plus* the projected annual operating costs of providing electric service under City ownership, including daily operating and maintainance costs, ongoing capital investment, and the cost of acquiring and transmitting power to the City.

Evergy Option: The electric rates under this option reflect a forecast of Evergy's future rates for continuing to serve the City.

Figure ES-1: Rate Comparison Approach

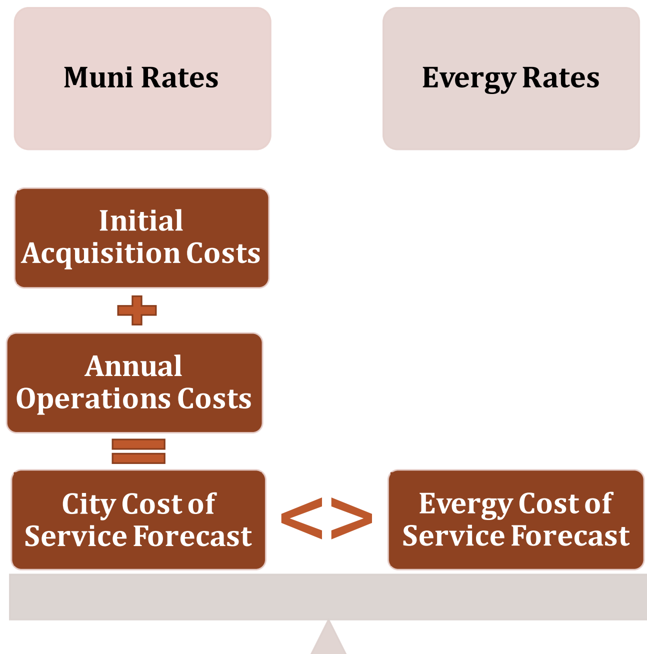
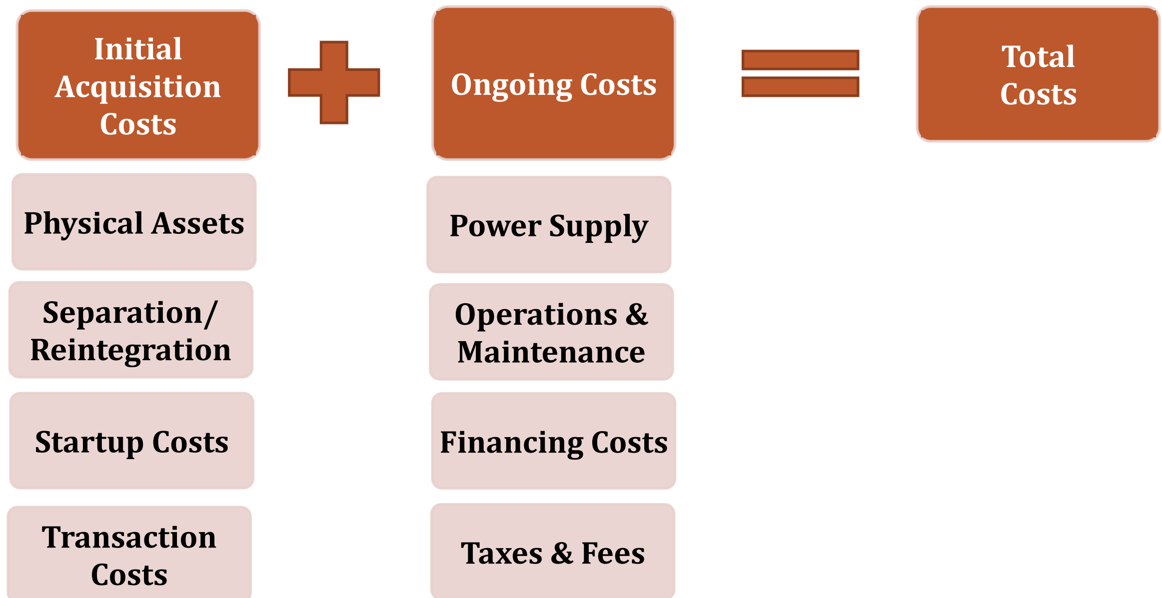


Figure ES-2 identifies the categories of costs that need to be evaluated in the City Option, including the initial costs to acquire the utility property, the costs to separate the distribution system that would be owned by the City from the remaining Evergy system ("separation costs"), the costs to reintegrate the Evergy system if the City distribution system is separated ("reintegration costs"), the costs for the City to establish a new municipal utility ("startup costs"), and the various costs that would be incurred by the City related to its acquisition of the Evergy distribution assets within the City ("transaction costs"). In addition, the City would also incur various costs associated with the ongoing operations of a municipal utility. These ongoing costs would include the cost of acquiring and transmitting power to the City ("power supply costs"), the cost of operating and maintaining the municipal utility on a daily basis ("O&M costs"), the principal and interest expenses associated with the debt used by the City to acquire Evergy's utility property and fund capital expenditures ("financing costs") and a replacement for the property taxes and other fees that the municipal utility would forego by leaving the Evergy system.

Figure ES-2: Total Municipalization Costs



Based on the analysis described herein, Figure ES-3 shows that the estimated cost to acquire the Evergy property and form a new municipal utility effective in 2022 is approximately $125.9 million.[4] This total estimated acquisition cost reflects:

- the costs to acquire the Evergy property, land within the City as of the transaction date;[5]
- the separation and reintegration costs;
- the transaction costs (including legal and consulting fees, and underwriting costs necessary to issue debt to finance the acquisition costs and fund the startup efforts) and;
- the municipal utility's startup costs (including new systems, inventory, facilities, and machinery necessary to operate and maintain the distribution system, manage customer relationships, bill for service and financial reporting).

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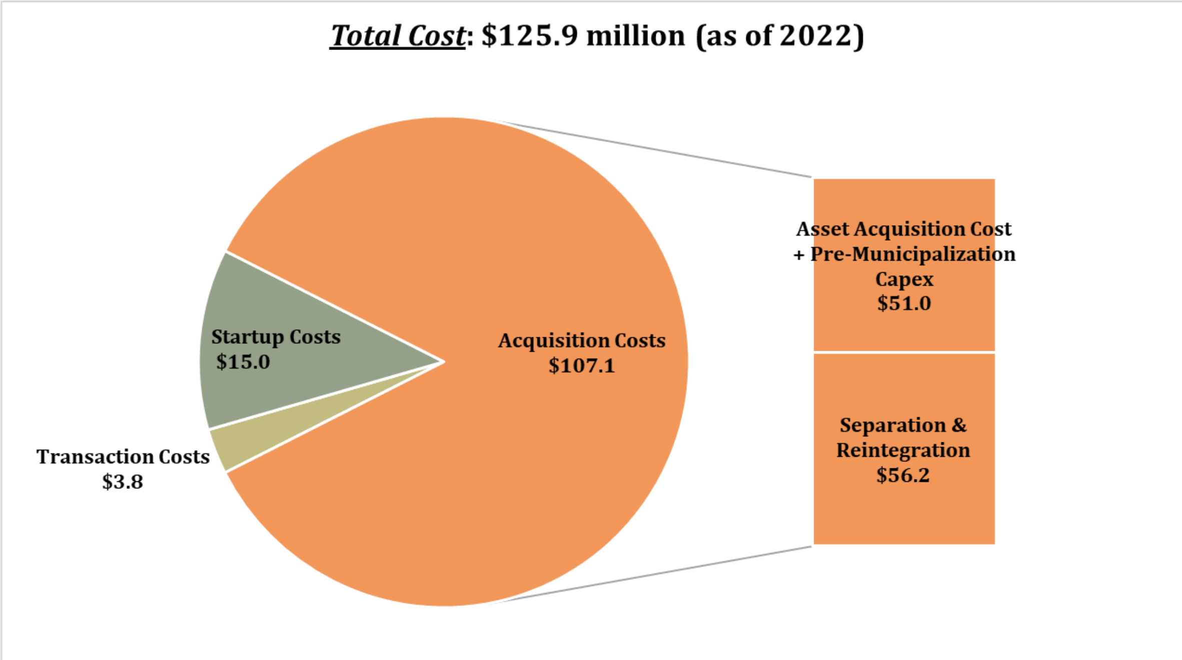
4 This is a preliminary estimate that can only be refined after a complete system inventory of the property that would be acquired is conducted. In addition, the estimated cost to acquire Evergy's utility property in the City herein does not reflect any value associated with Going Concern (*i.e.*, the compensation to Evergy for lost revenues if the City were to municipalize the electric distribution system).

5 Selected land values are reflected in the analysis at their original cost and are not depreciated. However, an indepedent study commissioned by the City would be required to determine final values for Evergy's land and land rights, as well as private land easements, which are not included in the analysis.

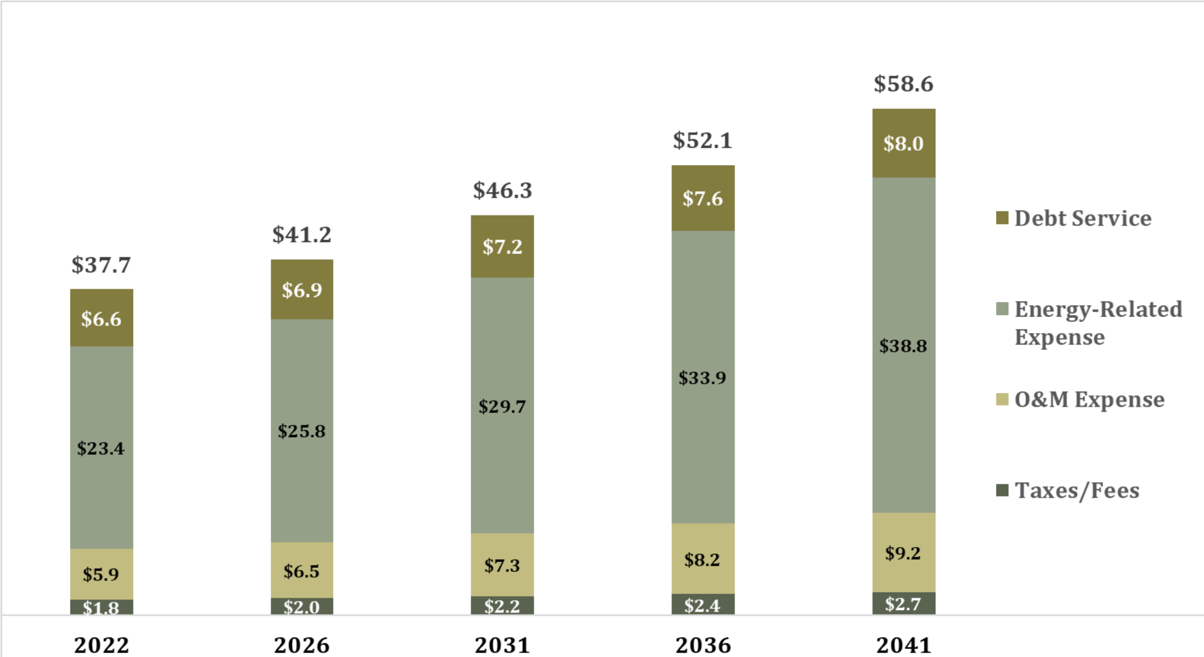
Figure ES-3: Preliminary Estimate of Initial Acquisition Costs



As shown in Figure ES-4 and described in detail herein, the cost to operate a municipal utility in the City is estimated to be approximately $37.7 million in 2022. The largest cost to the City of providing service would be the cost of acquiring power supply at market rates and transmitting it to the City over Evergy's existing transmission system. As shown, debt service costs, which are a function of the $125.9 million in acquisition costs shown in Figure ES-3, are also a major element of the cost of providing service. The cost to acquire the physical assets, as well as fund the separation and reintegration costs, are assumed to be financed with 30-year taxable revenue bonds,[6] while the transaction costs, startup costs, and other ongoing operating costs are assumed to be financed with 30-year tax-exempt debt.

6 Public Finance Network. "Tax-Exempt Financing: A Primer", p. 22.

Figure ES-4: Preliminary Estimate of Ongoing Operating Costs Under the City Option ($Million)



Based on the estimated acquisition and operating costs that the City would incur under the City Option, and the estimated electric load of the customers within the City limits, Concentric developed a projected electric rate for the municipal utility over a 20-year period ("Forecast Period").

For comparison, comparable projected future retail electric rates under the Evergy Option were also developed. To forecast Evergy's rates, historical retail electric rate change trends within the Southwest Power Pool ("SPP") were evaluated to estimate the frequency and magnitude of potential future rate changes over the Forecast Period. Since Evergy has a distribution base rate freeze currently in place through 2023, the analysis herein assumes a rate increase for Evergy of 5.29 percent every three years once the existing distribution base rate freeze expires.[7]

[7] While Evergy's base distribution rates are frozen through 2023, the remaining components of Westar's rates (*i.e.*, the retail energy cost adjustment, transmission delivery charge, and property tax surcharge) are not. Thus, while the analysis herein reflects a base distribution rate freeze through 2023, the other components of Westar's rates are assumed to adjust annually, including during the period when the base distribution rates are frozen.

With the projected rates for both the City Option and Evergy Option developed, those rates are then compared to determine whether the City would be expected to benefit or incur costs over the Forecast Period associated with forming a municipal utility. As shown in Figure ES-5, municipal utility rates are expected to exceed those of Evergy by approximately $24/megawatt-hour ("MWh") in 2022, and the rates under the City Option are projected to continue to be higher than the Evergy Option throughout the 20 years of the Forecast Period. On a net present value ("NPV") basis, the City Option is projected to result in an incremental cost to Pittsburg customers of approximately $60 million over the initial 10 years of municipal utility operation, and approximately $107 million over the initial 20 years of operation. This indicates that municipalization would result in a substantial net economic detriment to the electric customers in Pittsburg over the long-term relative to continuing to take service under the Evergy Option.

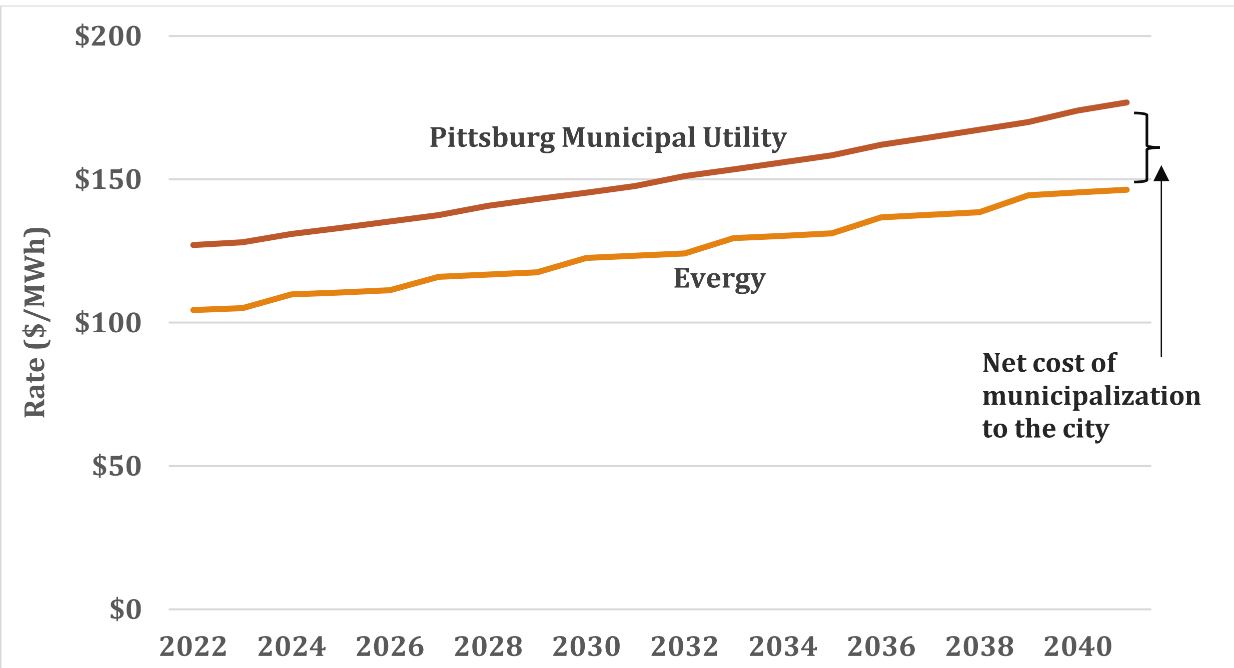
-$60 Million

10-year net present value ***cost*** to the City of switching to municipal ownership

-$107 Million

20-year net present value ***cost*** to City of switching to municipal ownership

Figure ES-5: Projected Rate Comparison – City Option v. Evergy Option



There are inherent uncertainties associated with projecting costs and rates over such an extended period. In order to recognize the risks of relying on long-term forecasts, two alternative scenarios were also conducted to reflect the potential for variation in certain key assumptions.

The first scenario assumes that costs for municipal acquisition and ownership would be higher than estimated in the Base Case (*i.e.*, the "High Cost Scenario"), and the second scenario assumes that those costs would be lower than estimated in the Base Case (*i.e.*, the "Low Cost Scenario"). These two scenarios reflect changes in power supply costs, O&M costs, legal fees, and startup costs under the City Option, and a change in the frequency and magnitude of future Evergy rate changes in the Evergy

Option. Each scenario reflects changes to all of the key assumptions (*i.e.*, in the High Cost Scenario, all changes to these assumptions increase the costs of municipal acquisition and ownership in the City Option and likewise decrease those costs in the Low Cost Scenario relative to the Base Case). All changes to operating cost assumptions represent a reasonable range of cost factors based on other experiences with municipal utility ownership and operation.

Figure ES-6 compares the assumptions utilized in the Base Case relative to the High Cost and Low Cost Scenarios.

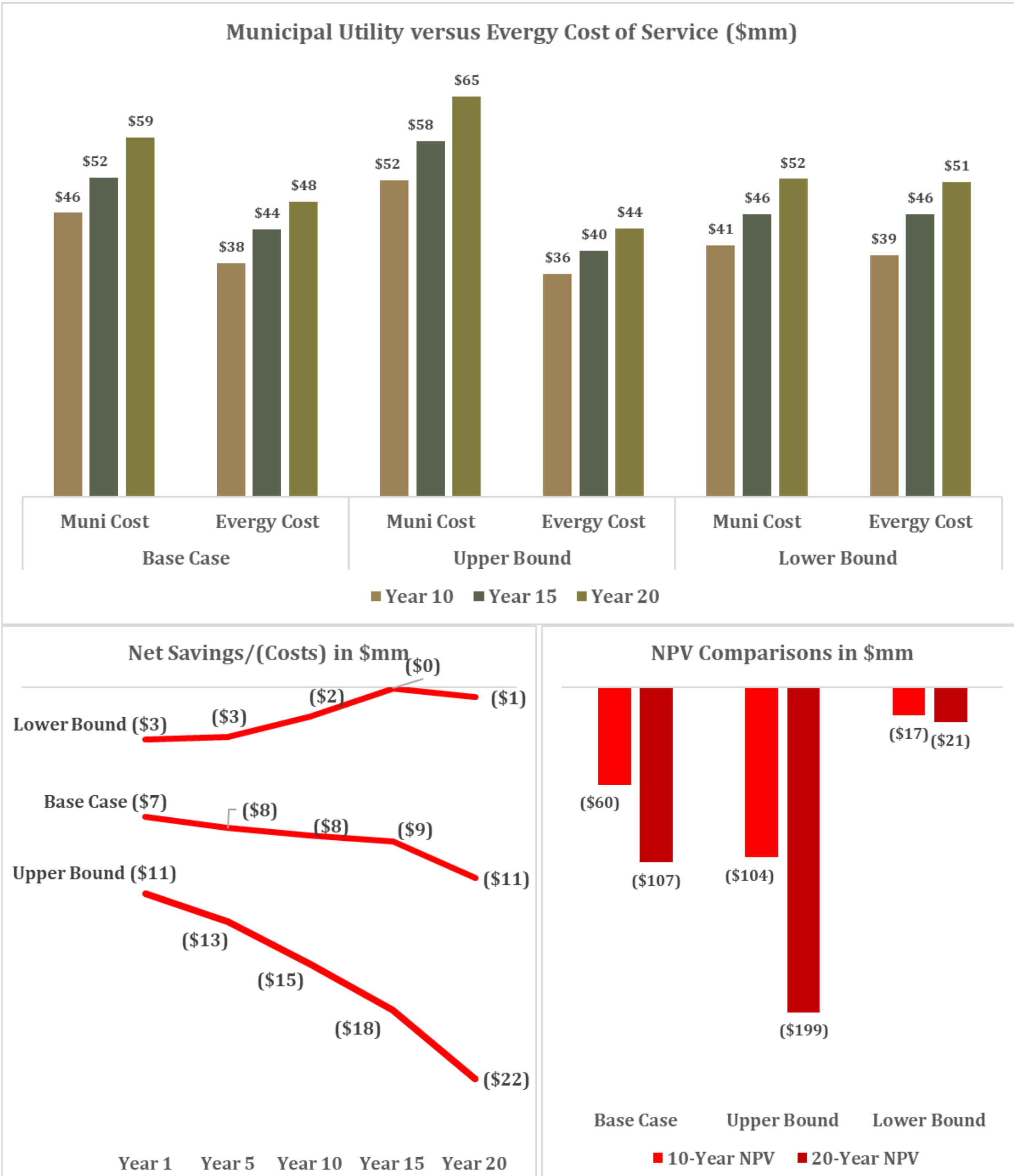
Figure ES-6: Key Scenario Assumptions

Assumption	Base Case	High Cost Scenario	Low Cost Scenario
Power Supply Cost (%)	N/A	+10.00%	-10.00%
Non-Fuel O&M Costs (2022$/customer)	$551	$739	$360
Legal Costs (2022$ million)	$3.0	$5.0	$1.0
Startup Costs ($2022 million)	$2.0	$2.9	$1.2
Evergy Rate Increase[8] (every 3 years) (%)	5.29%	2.80%	6.97%

Figure ES-7 summarizes the results of the Base Case relative to the two alternative scenarios. The top chart illustrates a comparison of the projected cost of service of the City Option versus the Evergy Option for selected years over the 20-year Forecast Period. In both alternative scenarios, the cost of the City Option is expected to exceed the cost of the Evergy Option. As a result, the City is expected to incur a net cost if it were to switch to municipal utility service. The chart in the lower right indicates that on an NPV basis over the entire 20-year Forecast Period, the estimated net <u>*cost*</u> to the City if it were to municipalize the electric distribution system ranges from approximately $17 million in the Low Cost Scenario to approximately $199 million in the High Cost Scenario.

8 The Evergy Rate Increase assumption reflects assumptions about the changes in the total cost of service resulting from remaining with Evergy. For example, the Low Cost Scenario demonstrates the feasibility of municipalization under more favorable terms to the municipality. Therefore, in the Low Cost Scenario, the Evergy rate increase assumption is a higher increase to the Evergy cost of service. Conversely, in the High Cost Scenario, the Evergy Rate Increase assumption is a lower increase to the Evergy cost of service.

Figure ES-7: Scenario Results



Note: Year 1 for all cases is 2022

Beyond an understanding of the future rate impacts, there are several additional financial and non-financial factors that should be considered by the City and its residents to make an informed decision regarding municipalization of the electric distribution system:

Control: Taking ownership and operation of the electric system would provide the City with greater control over decisions that uniquely affect its electric utility, the services that are provided, and the rates that customers pay. For example, the City could decide to expand the net metering program for customers or increase spending on energy efficiency programs. Of course, the ability to make these decisions comes with the knowledge that Pittsburg customers will pay for all the costs of such programs in addition to needing to recover the costs associated with owning and maintaining the electric utility.

Customer Service: Customers will continue to care about the quality of service that they receive and their interactions with the utility when requesting a new service, asking questions or registering concerns. Currently, Evergy provides its electric services in a cost-efficient manner with staffing, processes, and systems that are sized to serve the needs of its entire customer base. The City may be able to replicate this function with local personnel or may decide to rely on a combination of outside vendors and City functions. In either case, the City will not have the economies of scale that are possible at a large utility. On the other hand, the claim is often made that local personnel may be more responsive to customer concerns.

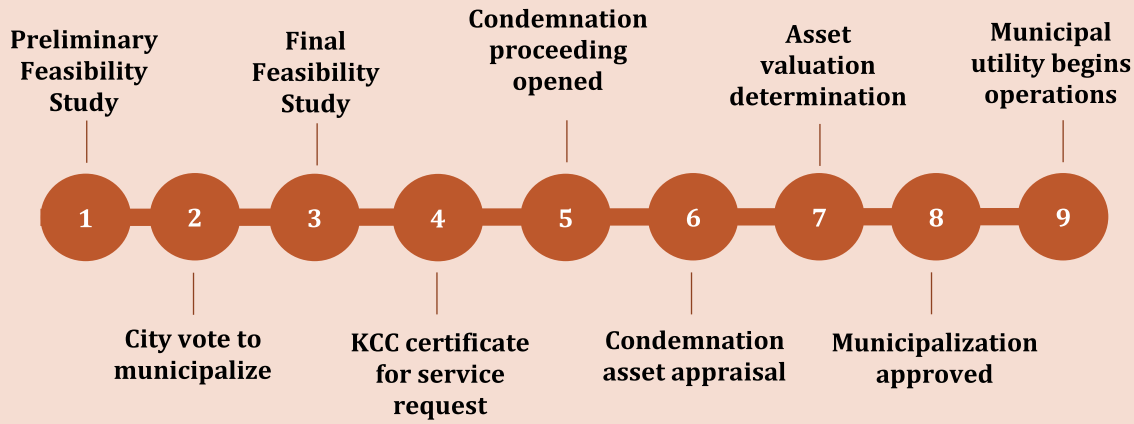
Governance: Evergy is regulated by the KCC, which has a staff of attorneys, economists, accountants, and engineers. If municipalization is pursued, the City would need to establish a governance organization to review its revenue requirement, approve key policies and decisions, and oversee the quality of service provided by the municipal electric utility.

Execution of Operation: The citizens of Pittsburg will want to make a realistic assessment of the ability of a City-owned utility to execute on its obligations to provide safe and reliable electric service at levels that approximate or exceed the level of service provided by Evergy. This includes the ability to effectively manage the day-to-day operations, address and manage outages and emergencies, and the ability to plan for and successfully implement required future system investments. The ability to execute effectively on the operation of the municipal utility is referred to as "operating risk" and often receives minimal consideration in municipalization assessments; however, the municipality would be entering a new business that is vital to the health, safety and financial well-being of its citizens.

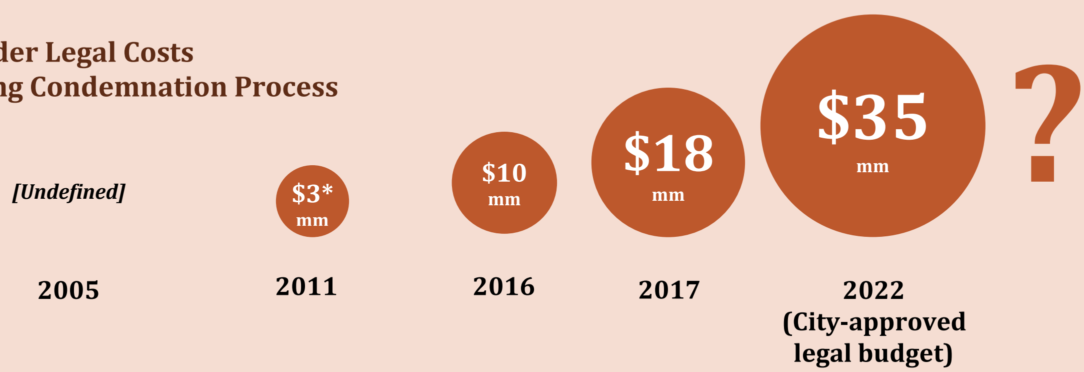
Municipalization Process and Cost Uncertainties

The timeline below shows key steps throughout a condemnation process. The entire process can take years, or well beyond a decade as in the case of Boulder, Colorado, which is still ongoing. Throughout the process, costs can escalate significantly. To illustrate, the graphic below shows Boulder's estimated legal fees at key condemnation steps in its municipalization pursuit. In 2017, Boulder approved a budget of $35 million for legal fees through 2022 toward its municipalization effort, though the municipalization effort has not been yet been completed. For context, Evergy's customer base in Pittsburg is approximately one-fifth that of Boulder's customer base and the $35 million in legal fees is approximately equivalent to the City's 2018 revenue.

Key Municipalization Steps Through Condemnation



Boulder Legal Costs During Condemnation Process



* Includes engineering fees

Note: Pittsburg 2018 budget available here.

1 INTRODUCTION

Concentric has performed a Preliminary Feasibility Study that assesses the costs and implications of the City acquiring Evergy's existing utility assets and assuming responsibility for providing electric service to Evergy's Pittsburg customers.[9] As an independent assessment, the Preliminary Feasibility Study presents certain facts and perspectives that inform the primary stakeholder constituencies: Evergy as the current electric utility owner and service provider; the City and its officials; and the residents and businesses that depend on safe, reliable and reasonably priced electric service.

Concentric has evaluated the projected future cost of providing electric service under two options:

(1) continuation of Evergy as the service provider (*i.e.*, the Evergy Option); and

(2) service provided by a newly formed City municipal electric utility (*i.e.*, the City Option).

The City Option requires the purchase of certain electric distribution and other assets from Evergy at a price that would either be agreed upon or determined through a regulatory approval process under the oversight of the KCC. There would be additional costs related to the separation of the municipal system from the Evergy system and the reintegration of the remaining Evergy system. Financing of the acquisition would be included in the cost of a municipal electric utility and recovered along with other costs through the rates charged by the City.

In addition to comparing the rates under the City and Evergy Options, it is also necessary to ensure that there is a fair comparison between the services that would be provided by either the City or Evergy. For example, certain services are currently provided by Evergy throughout its service area and are included within the charge for basic electric service. The costs of those services (*e.g.*, support for renewable energy, local property tax, franchise fees) would need to be considered as part of the service provided by the City in order to provide a fair comparison to the Evergy tariffed service.

There are also certain nonfinancial factors that should be considered by the City in deciding whether to assume responsibility for providing electric service. For example, the City would have greater control over decisions that relate to the specific services to be provided and control over spending priorities that determine the capital and operating budget. However, the City would also be responsible for operating and maintaining the electric system, including responding to outages and other unforeseen challenges. The City would also need to determine which of the many oversight and regulatory services currently provided by the KCC would need to be replicated by the City with appropriate governance procedures.

The Preliminary Feasibility Study is composed of the following sections:

Section 2: Background on Pittsburg, Kansas – provides an overview of the City.

Section 3: The Municipal Alternative – discussion of the municipalization process as informed by Kansas law and relevant precedents, providing important context for the decision faced by the City.

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9 This Preliminary Feasibility Study provides a high-level analysis of the valuation of Evergy's assets within the Pittsburg city limits. A more detailed review and certified appraisal report is likely to be required should the acquisition be approved by Pittsburg voters.

Section 4: Projected Costs for Pittsburg to Form an Electric Utility – presents various factors that are relevant to the determination of a fair acquisition price under the City Option, and presents a preliminary range for acquisition costs that the City can expect based on a reasonable set of assumptions.

Section 5: Projected Costs for Pittsburg to Operate an Electric Utility – summarizes the City's cost of providing electric service under the City Option, including the financing costs attributable to the acquisition, along with all other costs of providing service.

Section 6: Forecast of Evergy Revenue Requirement – presents the projected costs of electric service under the Evergy Option.

Section 7: Preliminary Feasibility Study Financial Results – compares the costs under the City and Evergy Options, and also provides a sensitivity analysis that illustrates the effect of changing key assumptions of the Preliminary Feasibility Study.

Section 8: Other Factors to be Considered – provides a discussion of additional municipalization considerations.

2 BACKGROUND ON PITTSBURG, KANSAS

2.1 OVERVIEW

Pittsburg, Kansas is located in the southeastern county of Crawford near the Missouri state border. The City is home to approximately 20,000 residents and has a median household income of $31,498, 42 percent lower than the state median income. Home values in Pittsburg are approximately 40 percent lower than the state median home value. The City covers 12.8 square miles and hosts Pittsburg State University, as well as a small regional airport.

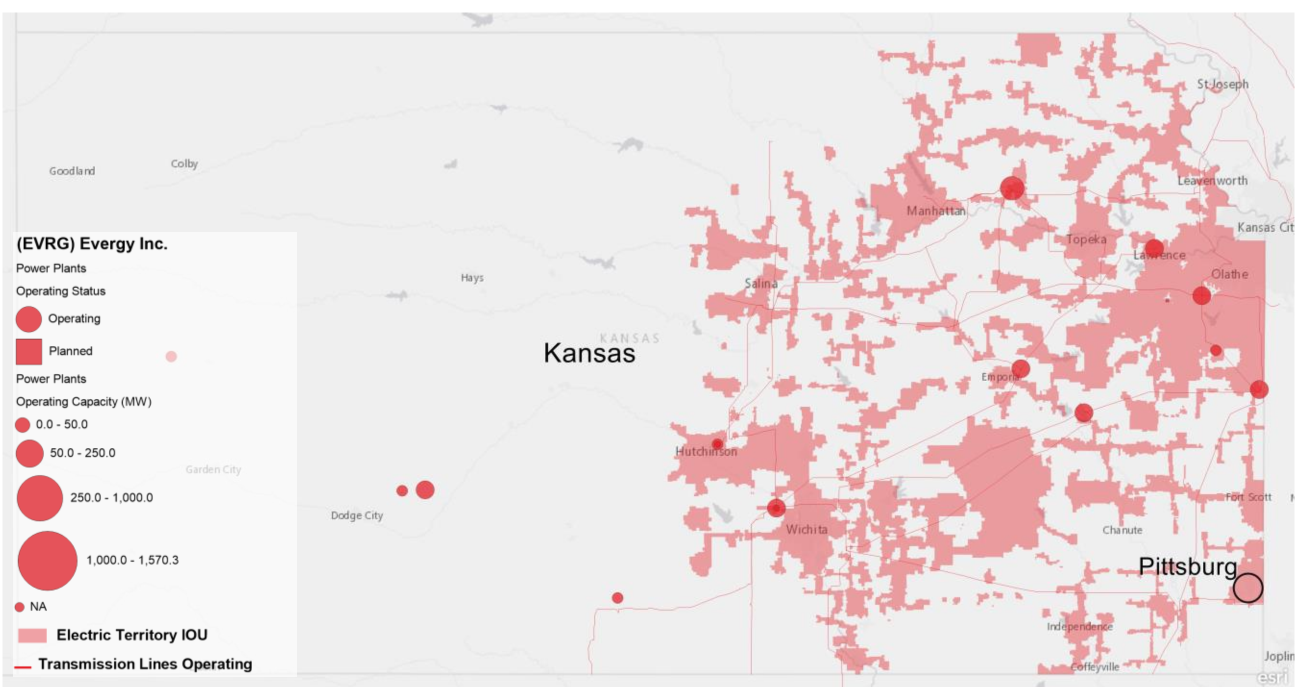
Figure 1: Demographic Summary

Metric	Kansas	Pittsburg
Population (No.)	2,911,505	20,178
Households (No.)	1,121,943	7,819
Median Income ($)	55,477	31,948
Owner Occ Housing Units/ Housing Units (%)	66.4	42.5
Median Value of Owner-Occupied Housing Units ($)	139,200	84,800
Unemployment Rate (%)	3.7	4.0

Source: S&P Global Market Intelligence, U.S. Census Bureau, and [Area Vibes]

Evergy and its predecessors have served the City since 1909. The map on the following page shows Evergy's electric territory in Kansas, which includes the City.

Figure 2: Map of Evergy Electric Service Territory in Kansas



2.2 DRIVERS OF MUNICIPALIZATION IN THE CITY

The impetus for considering municipalization varies but often centers around issues such as:

- desire for local control;
- the prospect of obtaining a more environmentally-friendly electricity supply;
- dissatisfaction with the existing utility supplier attributable to price and/or perceived service issues; and/or
- perception that electricity prices will be lower with municipal ownership due to financing advantages or the belief that it will be possible to bypass costs incurred by the existing utility to provide service.

The City's municipalization efforts are driven primarily by concerns over increasing utility rates. As part of the City's pursuit of electric cost savings, it has also expressed interest in having more renewable energy and flexibility with respect to distributed resources, as demonstrated by the Mid-City Renaissance planned solar project.

Since 2008, the KCC has approved six rate increases for Westar and eight for KCP&L in Kansas, along with one rate decrease in 2018 for each of the companies.[10] The rate proceedings since 2008 were primarily driven by increasing costs associated with demand, increasing renewable generation, and complying with environmental, security, and reliability regulations. Westar's 2018 rate decrease was driven by savings resulting from the Tax Cuts and Jobs Act of 2017, as well as their refinancing of debt at a lower cost relative to the rate case immediately prior to the 2018 rate case. Customers also received bill credits resulting from the merger of equals between Westar and Great Plains Energy that created the combined utility that was completed in June 2018.[11]

Driven by rate concerns, on January 26, 2018, the City issued a request for proposals ("RFP") to consultants seeking economic, legal and technical guidance related to the process of municipalization of its electric utility services.[12] The RFP followed a series of internal City discussions and discussions with both Evergy and other stakeholders. Pittsburg currently has a non-exclusive franchise agreement with Evergy on a year-to-year basis. The City has not yet determined the exact scope it plans to pursue for the potential creation of a municipal electric utility but has indicated that it is only interested in purchasing the distribution system and that Evergy would continue to own the transmission assets in the City.[13] The City has proposed to pay for the acquisition over a 20-year period financed by bonds.

Prior to its decision to explore municipalization, the City was also exploring options for a 35-acre solar photovoltaic generation facility to be located at an existing brownfield site for which the City

10 S&P Global Market Intelligence.

11 Horwath, J., "Pittsburg, Kan., looks to take over electric service from Westar Energy," March 21, 2019. (https://www.spglobal.com/marketintelligence/en/news-insights/trending/5OqzOHdp8HY4jcmxlH3FzA2)

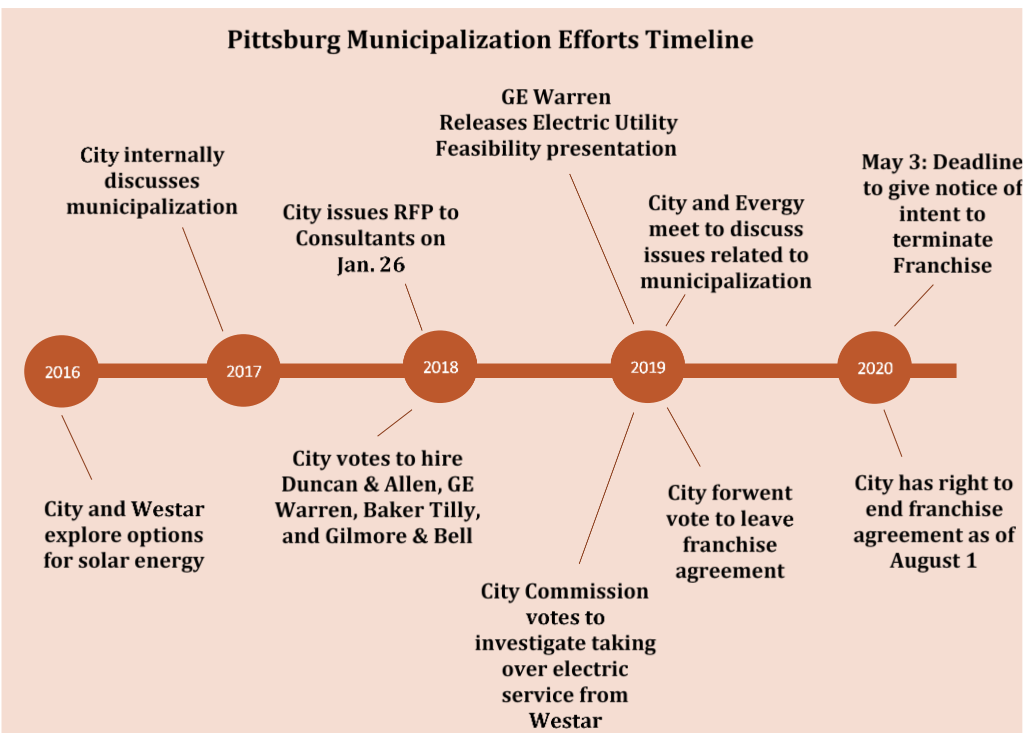
12 City of Pittsburg, KS RFP.

13 Questions asked by the Participants of the Pitt Area Young Professionals Lunch & Learn.

had previously received United States Environmental Protection Agency ("EPA") grant funding.[14] The City expressed interest in the development of the renewable project as a means to potentially offset electricity costs.[15] The City inquired with Evergy whether the project would qualify for net metering or some other contractual arrangement where it could receive payment for the energy produced at the facility, and Evergy responded identifying the limitations of net metering (in Kansas, projects under 100 kW qualify for net metering) and Evergy's standard rate for the avoided cost of electricity that the project could receive if the City were to try to use the facility to offset its electric costs.[16] The City noted that Kansas' lack of laws for remote net metering or community solar was a roadblock, but one that "may be eliminated in the near future."[17]

2.3 TIMELINE OF MUNICIPALIZATION EFFORTS

Evergy's existing franchise agreement with Pittsburg was effective as of August 1, 2015. The franchise agreement has an initial term of two years and then automatically rolls into one-year terms unless terminated by one of the parties with at least a 90-day notice prior to the end of the one-year term. This means that Pittsburg has the right to end the franchise agreement as of August 1, 2020, provided it gives notice of its intent to terminate by May 3, 2020.



14 "The Mid-City Renaissance Project," April 26, 2016. (https://midcityrenaissanceprojectpittsburg.wordpress.com/); *see also*, Interoffice Memorandum from John Bailey to Daron Hall, June 15, 2016.

15 Interoffice Memorandum from John Bailey to Daron Hall, June 15, 2016.

16 Letter from Greg Greenwood to John Bailey, June 21, 2016.

17 Mid-City Renaissance District: An EPA Brownfields Area-Wide Plan, City of Pittsburg, Kansas, May 2017. (See pdf p. 29: https://www.pittks.org/wp-content/uploads/2017/05/05-23-17-Agenda-2.pdf)

3 THE MUNICIPALIZATION PROCESS AND EXPERIENCE

3.1 OVERVIEW

Forming a municipal electric utility can be challenging, even when projections estimate that there is a compelling economic and/or public benefits case to be made. The municipality is making an irrevocable decision to finance and acquire assets from the existing utility provider; assume the obligations of providing reliable, safe, and affordable electric service; and form an organization and governance structure to manage and operate the utility. The municipality is not only committing to acquiring existing electric assets, but to maintaining those facilities according to national standards and to continuing to make investments that support the services local residential and business customers expect. The Pittsburg City Commission and the City's residents and businesses, as the ultimate decision makers, will need to make a well-informed decision that considers economic and other considerations, recognizing that expected electricity prices may turn out to be higher or lower due to factors that are both within and beyond the municipality's control.

3.2 LEGISLATION AND MUNICIPAL AUTHORITIES

KANSAS STATUTES

Kansas statutes (*see* K.S.A. 66-1,176b, 66-1,176c, and 12-811) govern the procedures and compensation requirements for municipal purchase of a utility plant, differing in the status of the franchise. K.S.A. 66-1,176b applies if the city terminates service rights while the franchise is still in effect. K.S.A. 12-811 and 66-1,176c apply if the franchise has expired or will expire before proceedings are complete.

The process to be followed upon franchise expiration is provided in K.S.A. 12-811. The governing body must first pass a resolution to acquire the utility system, which is filed with the district court. Sufficient notice must be given for a hearing, and the court enters an order granting the application and providing for the selection of three commissioners. One commissioner would be selected by the City, one by Evergy, and one designated by the court. The commissioners examine the plant, including the involvement of experts and "persons familiar with the cost, construction and reproduction cost" of the plant.[18] The City and Evergy may also provide testimony. The Commissioners issue a report, and parties have ten days to file exceptions. Following any exceptions, a hearing would be held by the Court on the report and any exceptions. The court can confirm, reject, or modify the report in a decision that is considered a final order, which may be appealed to the Kansas Supreme Court. The City commission may issue bonds to purchase the plant if a majority of voters approve the purchase. If the City chooses to pay the determined amount, it will do so within six months of the final order (or the final judgement if it was appealed).

18 K.S.A. 12-811.

K.S.A. 12-811 does not provide a specific formula for the purchase price but states that the commissioners will "ascertain the fair cash value of said plant and the appurtenances thereunto"[19] excluding the value of the franchise or contract. The commissioners are to examine the plant and may "examine experts and persons familiar with the cost, construction and reproduction cost of such plant".[20] In addition to this, K.S.A. 66-1,176c provides that the electric supplier is entitled to compensation for costs of detaching the facilities to be sold and reintegrating the remaining facilities, less the value of any facilities that are replaced as a requirement for reintegration of the system.

If the franchise is still in effect, K.S.A. 66-1,176b provides that the compensation to the utility should be agreed upon by the parties or determined by the following formula:

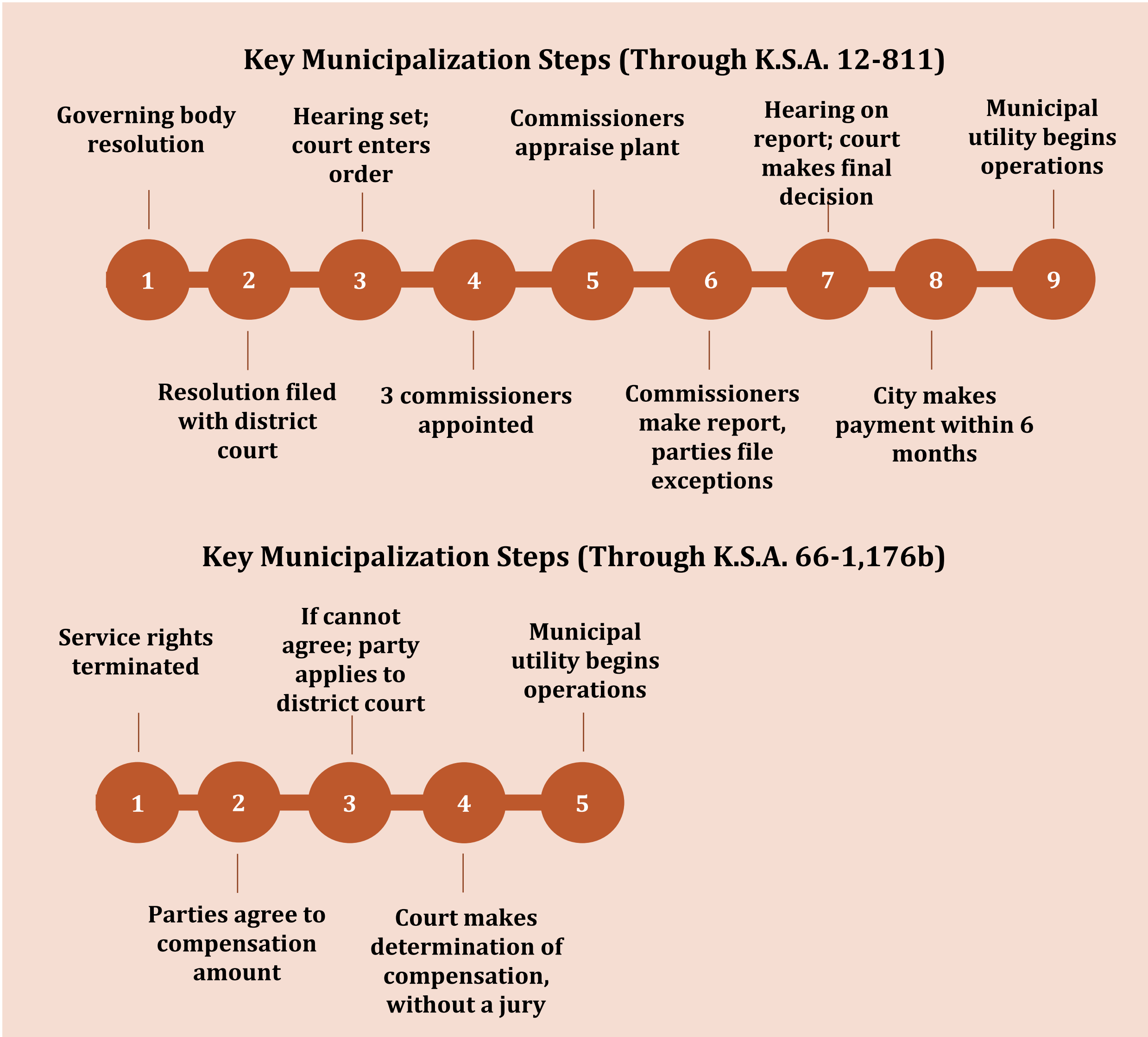
- The depreciated replacement cost of the facilities being acquired;
- The depreciated replacement costs of remaining power contracts or agreements;[21]
- The depreciated replacement cost of facilities outside the affected territory used to service the area, including generation and transmission facilities;
- Costs of detaching the system, including costs of studies and inventories, and costs of reintegration of the system;
- Two times the net revenues received by the utility during the 12 months before termination, multiplied by the years remaining in a franchise contract; and
- State and federal tax liability from the income received in the above provisions.

The process for municipalization of an electric utility can take many years and require considerable expense to retain legal, consulting, engineering and other expert services. Key steps in the municipalization process are highlighted below.

19 K.S.A. 12-811.

20 *Id*.

21 The Feasibility Report did not include the depreciated replacement cost of ongoing power contracts or agreements.



EMINENT DOMAIN

Chapter 26 of the Kansas statutes covers eminent domain with K.S.A. 26-501 through 26-519 describing the procedures that would cover municipalization cases. An eminent domain procedure must be brought by filing a verified petition, including information on:

- the authority and purpose;
- a description of each portion of land; and
- the name of the owner or possessor.

The court must fix a date for consideration of the petition, and due notice must be given. After hearing suggestions from parties, the judge will appoint three appraisers to evaluate the land and to determine the compensation. Once their work is completed, the appraisers must file a report with the district court and parties are to be notified. The appraisers must then give testimony in a hearing.

The plaintiff is to then pay the amount determined by the appraisers to the clerk of the district court, at which point the property would be transferred. If the plaintiff does not make the payment within 30 days, the condemnation is abandoned. If either party is dissatisfied with the appraisers' award, they may file an appeal with the district court, which would open a new proceeding in which the only issue to determine is the compensation.

The components of compensation in an eminent domain case are laid out in K.S.A. 26-513. Compensation should be the fair market value if the entire piece is taken, and if only a portion is taken, should be the difference between the fair market value of the entire property before the taking and the value of the portion remaining immediately afterwards. Additional factors to consider include access and appearance, severance, loss of certain items, damage, and costs of certain new replacement items.

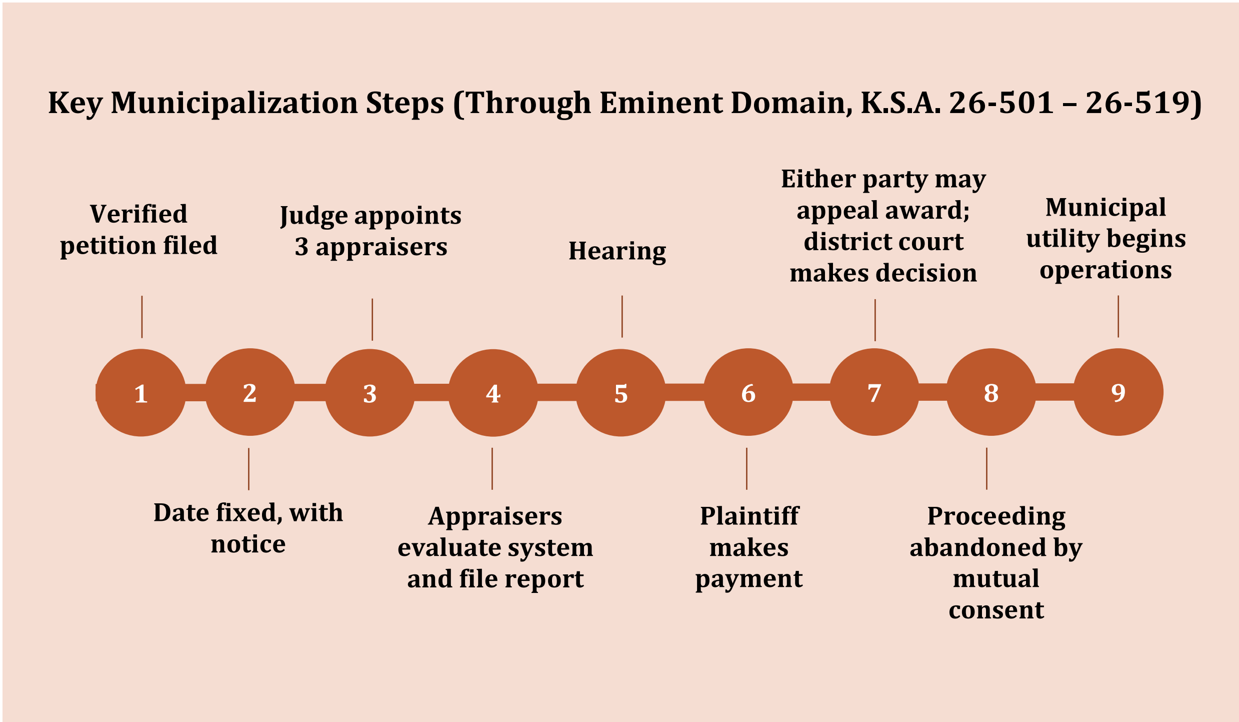
Fair market value is defined as "the amount in terms of money that a well-informed buyer is justified in paying and a well-informed seller is justified in accepting for property in an open and competitive market, assuming that the parties are acting without undue compulsion."[22]

Methods to determine the fair market value include:

- Comparable sales wherein the property is compared to recent similar sales. Municipalization of an electric utility is uncommon, and highly dependent upon a range of local factors. Thus, the comparable sales approach is not applicable in this case.
- Income approach in which the property is assumed to generate income. A common approach is a discounted cashflow.
- Cost approach where it is assumed the buyer will pay the equivalent of a substitute property.

The municipalization process through eminent domain statues is outlined below.

[22] K.S.A. 26-513 (e).



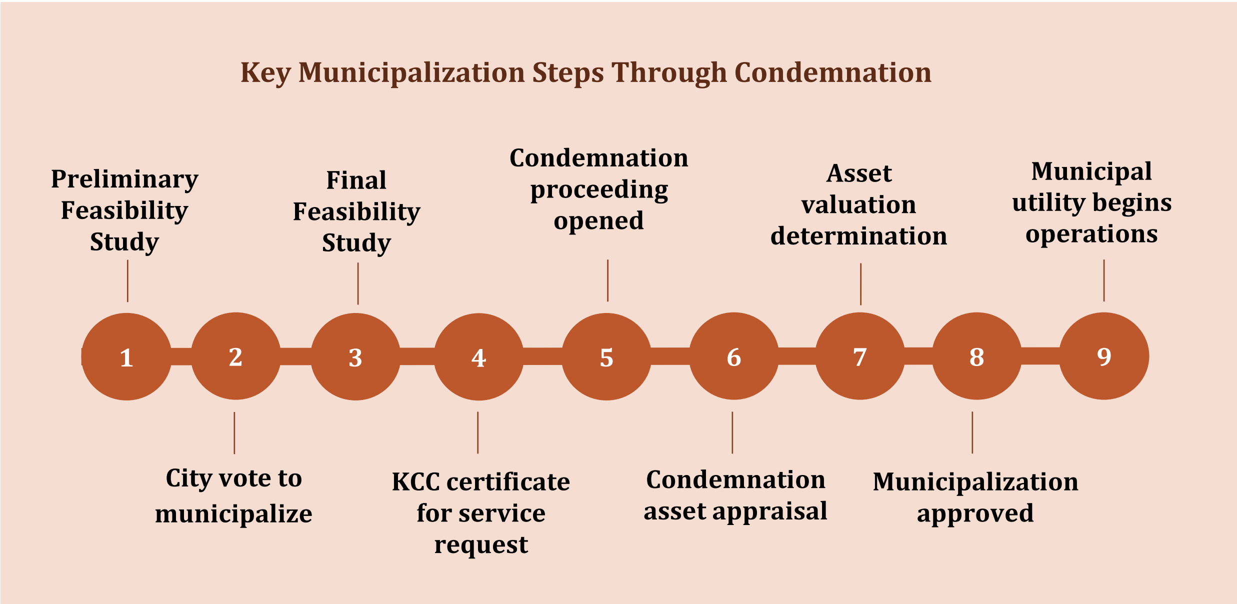
STEPS TO ESTABLISHING A MUNICIPAL ELECTRIC UTILITY

In addition to acquiring the physical assets of the existing utility, the City would need to secure contractual arrangements to acquire electricity supply and have it delivered to the City via interconnections with transmission facilities that are owned by Evergy or by other third parties. Efforts to secure electricity supply contracts and transmission service typically proceed in parallel with the municipalization process.

Just compensation is one factor in determining whether municipalization makes economic sense. However, it is often the case that this value is not known with certainty as the public is considering the municipal option. Therefore, there is significant a risk that the City Council and voters will decide to acquire the assets based on an estimated purchase price that is well below the final determination. A typical sequence of activities is as follows:

- The City or entity supporting municipalization decides to retain an outside contractor to perform a feasibility study addressing the cost of acquisition and operation of the electric utility.
- The City decides whether or not to move forward by establishing a public election.
- If approved by a majority of voters, the City submits a petition to the KCC.
- If the petition is challenged, regulatory proceedings commence through an KCC proceeding. The KCC determines whether or not the municipal operation of the electric utility system is in the public interest and the decisions made by the KCC are reviewable by courts of appeal. This process can take years to complete.

- Assuming the legality of the acquisition and just compensation are resolved and the condemnation proceeds, the community prepares to assume responsibility for management and operation of the utility, a process that can take up a year or more to establish the necessary contracts, properly staff the new municipal utility, and prepare to operate the municipal utility.



3.3 FEASIBILITY STUDY

A feasibility study is a report that provides the financial and operational considerations for the municipalization effort. As the primary source of information relied upon by municipal officials and voters, it is essential that a credible feasibility study be performed, meeting at a minimum the following criteria:

- Understandable: the study should be able to be easily understood by any voter interested in making an informed decision;
- Informed by Relevant Law, Policy, and Precedent: accurately define the requirements that a municipality must satisfy and the future operating environment in which investment and other decisions will need to be made;
- Objective: avoid any bias in the framing of the analysis or specifying assumptions, with conclusions and recommendations informed by relevant expertise and experience;
- Comprehensive: inclusive of all relevant quantitative and qualitative considerations;
- Rigorous: analytically sound and consistent with professional standards;
- Risk Analysis: reflect a reasonable range of potential outcomes that capture the range of uncertainty associated with both (i) "acquisition risks" (*i.e.*, the risks associated with the initial acquisition of a municipal electric system); and (ii) "operational risks" (*i.e.*, the risk to

be assumed by a municipality if it assumes responsibility for operating the utility, including the obligation to respond to severe storms and other extraordinary events); and

- Well Documented: all source materials, assumptions, and calculations should be fully documented.

Ultimately, the quantitative assessment of a feasibility study should produce a comparison of the cost and rate impact of future municipal ownership and operation versus the rate impact of continued ownership and operation by the incumbent utility. As noted, since there several assumptions required to assess the economic feasibility of municipal ownership and operation of the electric system, it is also important to consider reasonable variations in those assumptions to test potential future outcomes beyond a base case or most likely scenario.

The cost of providing electric service to be assessed in a feasibility study includes two primary components. First, there are the costs to be incurred by the municipality to acquire the utility property, along with the costs associated with the transaction and the required start-up costs:

- Acquisition Costs: Costs to acquire the physical utility assets, any stranded costs (*i.e.*, utility infrastructure investments that become redundant after the asset sale), and any separation and reintegration costs.

- Startup Costs: Costs to begin operation as a municipal utility, including initial capital expenditures, equipment inventory, facilities, fleet vehicles, staffing, and information technology, as well as the cost associated with maintaining cash balances to support day-to-day operations of the utility and respond to unanticipated events, including securing outside crews and equipment to assist with emergency storm restoration.

- Transaction Costs: Costs incurred to execute the transaction to acquire the utility's assets, including underwriting and debt issuance costs, as well as legal, engineering and consulting costs.

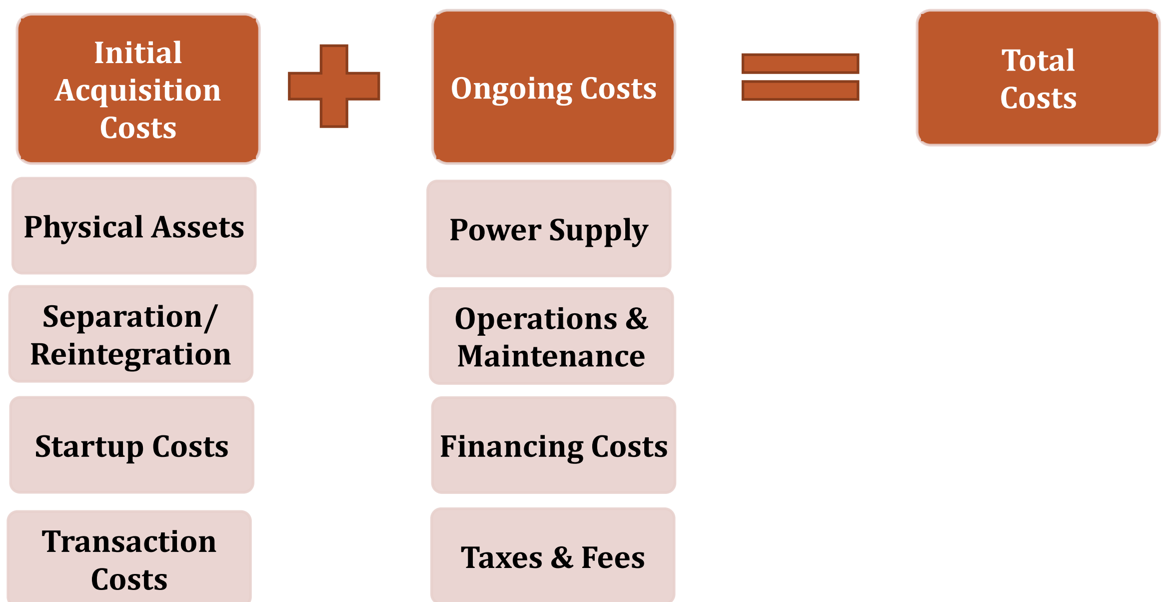
Second, there are the various costs for the municipality to operate the utility once it has been acquired:

- Power Supply Costs: the cost of purchasing a sufficient level of power to meet the local load requirements on an energy and capacity basis, and the cost of transmitting the power purchased to the expected point of delivery to the new municipal electric utility system.

- O&M Expense: the cost to operate and maintain the transmission and/or distribution systems, including substations, distribution lines, transformers, and communication facilities, as well as the costs attributable to vegetation management, utility crews and equipment. This includes administrative and general expenses (*e.g.*, administrative salaries, wages and benefits, insurance, outside services, rents, and other expenses not attributable to a specific utility function) and customer service expenses (*e.g.*, billing, collection, and customer information systems).

- Financing Costs: interest payments on the debt incurred to fund the acquisition of the utility system,[23] and principal and interest payments to finance incremental capital investments required to replace utility system assets, including assets that have failed or that are beyond their service life.
- Taxes and Fees: Replacement of local property taxes, franchise and other fees formerly paid by the utility to the municipality.

Figure 3: Municipalization Costs



The financing costs for a municipality to acquire an electric utility's distribution and/or transmission assets are based on the level of borrowing costs and the amount being financed, where the latter is the sum of the just compensation for the acquired assets plus all startup costs. As described in Section 5.3, while municipal utilities can issue low-interest, tax-exempt debt to finance their future capital needs, the City's initial acquisition of the utility assets will likely be financed with taxable debt similar to the debt relied upon by Evergy and other investor-owned utilities that finance investments to replace aging infrastructure, modernize the network, and support new services.[24] All financing costs are included in the total costs of providing basic electric service (commonly referred to as "revenue requirement") and recovered through electricity rates charged to customers.

Most utilities offer services that are more than "basic" service. These additional services, such as the presence of private solar panels on rooftops, may be provided to all customers, offered to all customers as an option, or offered to a subset of customers based on specified criteria. It is necessary

[23] The principal payments to fund the acquisition of the utility system is already accounted for in the cost to acquire the utility property, the transaction costs and the startup costs.

[24] Public Finance Network. "Tax-Exempt Financing: A Primer", p. 22.

to consider these harder-to-quantify factors to present a valid apples-to-apples comparison between the municipal and utility ownership alternatives. For example, there may be aspects of the existing utility service that a municipality may decide to expand, reduce or abandon. These include public benefits programs and value-added services provided by the utility, including:

- conservation and energy efficiency programs (*e.g.*, in-home audits; insulation and appliance rebates);
- low-income assistance;
- financial support for solar energy located on the customer's premises but connected to the utility distribution grid; and
- net metering, which provides customers with compensation for the on-site generation of power that is transmitted back to the distribution system

Depending on the services to be provided, the municipality may require an investment in infrastructure and/or new or modified information systems.

An issue that needs to be considered in the municipalization process is the impact of offering the various services. For example, an investor-owned utility generally recovers the costs of services over a large customer base; however, if a municipality were to municipalize and a greater proportion of its customers participate in energy efficiency programs or move to net metering (through installation of private rooftop solar panels), the municipal utility costs may be recovered over a smaller electrical sales volume, thereby increasing electricity rates for the remainder of the municipality's customers. The comparison between a municipal-owned utility and continuation of service from the utility needs to take these harder-to-quantify considerations into account to provide a fair comparison of the cost of service under each model.

Finally, there are several qualitative considerations that also affect the comparison between potential municipal utility ownership versus continued investor-owned utility ownership. These include service quality, customer service, reliability under favorable weather conditions plus the ability to respond to and fund storm-related and other extraordinary outages. Currently, Evergy's service quality is subject to oversight by the KCC. If the City were to municipalize, it would need to establish a governance structure to oversee the municipal electric utility's reliability, safety and affordability of service, as well as a process for resolving customer billing and other inquiries.

3.4 RECENT MUNICIPALIZATION EXPERIENCE

Based on the utility municipalization efforts of various communities in the past two decades, the clear majority have ultimately not proceeded to acquire and manage the local utility system. As shown in Figure 4, ten municipalization efforts initiated in the U.S. since 2000 have been completed, an additional community (Boulder, Colorado) has received approval to go forward with municipalization, seven additional communities are considering or seeking the necessary approvals for municipalization, and one state (Maine) is considering establishing a public power authority. The remaining 44 communities have decided not to proceed with municipalization for a variety of reasons, including the municipalization effort being rejected by voters or denied by a regulatory commission, and the costs and time necessary to complete the effort greatly exceed original estimates.[25] In fact, feasibility studies performed on behalf of municipalities frequently underestimate both the time and cost of completing municipalization efforts that do not have the cooperation of the existing utility service provider. One of the ten municipalization efforts that was completed (*i.e.*, Hercules, California) was later sold back to the utility due to mismanagement and cost escalation under municipal ownership and operation.

There have been no municipalizations of electric utility systems in Kansas in the past 20 years, and Concentric is not aware of any municipalities currently evaluating municipalization other than the City. Wichita, Kansas considered municipalization in 2001, but ultimately determined that rate relief through the established regulatory construct was a more appropriate approach.[26]

Figure 4: United States Municipalization Efforts: 2000–2019

Municipality	Utility	Year	Status	State
Sloan, NY	New York State Gas & Electric	2000	Referendum failed	NY
Las Cruces, NM	El Paso Electric Company (EPE)	2000	Abandoned	NM
Lakewood, NY	Niagara Mohawk	2000	Abandoned	NY
Lakewood, WA	Puget Sound Energy	2000	Defeated in Council	WA
Watford City, ND	Montana Dakota Utilities	2001	Referendum failed	ND
San Francisco, CA	Pacific Gas & Electric Company	2001	Referendum failed	CA
Wichita, KS	Western Resources	2001	Abandoned	KS
Hermiston, OR	Pacific Power & Light	2001	Completed	OR
Village of Hamburg, NY	New York Gas & Electric	2001	Abandoned	NY
Wagner, SD	Northwestern	2002	Rejected by Voters	SD
Oakland, CA	Pacific Gas & Electric Company	2002	Abandoned	CA
Saint Henry, OH	Dayton Power & Light, Midwest Electric	2002	Abandoned	OH
Hercules, CA	Pacific Gas & Electric Company	2002	Completed (sold back to PG&E in 2014)	CA
Corona, CA	Southern California Edison	2003	Abandoned by City Council	CA
Casselberry, FL	Progress Energy Florida	2004	Abandoned	FL
Chula Vista, CA	San Diego Gas & Electric	2004	Abandoned	CA
Clackamas, OR	Portland General Electric Co.	2004	Abandoned	OR
Rancho Cucamonga, CA	Southern California Edison	2004	Completed	CA
Moreno Valley, CA	Southern California Edison	2004	Completed	CA
San Marcos, CA	San Diego Gas & Electric	2004	Abandoned	CA
Pueblo, CO	Aquila	2005	Defeated in Council	CO
Fairfield, IA	Alliant Energy Corp.	2005	Abandoned	IA
Winter Park, FL	Progress Energy Florida	2005	Completed	FL
Cerritos, CA	Southern California Edison	2005	Completed	CA
Oregon Mutual Utility Development	Portland General Electric Co.	2005	Rejected by Governor	OR
Maitland, FL	Progress Energy Florida	2005	Rejected by City Council	FL
Iowa City, IA	MidAmerican Energy	2005	Rejected by Voters	IA
Belleair, FL	Progress Energy Florida	2005	Rejected by Voters	FL
Island Power, Pittsburg, CA	Former Military Base	2006	Completed	CA
Yolo Country, CA	Pacific Gas & Electric Company	2006	Rejected by Voters	CA
City of Paris, IL	Ameren Illinois	2007	Abandoned	IL
Titonka, IA	Interstate Power & Light Co.	2007	Abandoned	IA
City of Atka	Andreanof Electric Corp.	2008	Completed	AK
Everly, IA	Interstate Power & Light Co.	2008	Rejected by Iowa Utilities Board	IA
Kalona, IA	Interstate Power & Light Co.	2008	Rejected by Iowa Utilities Board	IA
Rolfe, IA	Interstate Power & Light Co.	2008	Rejected by Iowa Utilities Board	IA

25 For example, in the case of Las Cruces, New Mexico, in 1991, the consultant projected it would cost that city $13 million to $26 million to acquire the system. In 1999, Las Cruces abandoned its takeover effort after the costs escalated to over $105 million.

26 Dinell, D., "Electric feasibility study ready for release," August 27, 2000. (https://www.bizjournals.com/wichita/stories/2000/08/28/story5.html)

Municipality	Utility	Year	Status	State
Terril, IA	Interstate Power & Light Co.	2008	Rejected by Iowa Utilities Board	IA
Wellman, IA	Interstate Power & Light Co.	2008	Rejected by Iowa Utilities Board	IA
San Francisco, CA	Pacific Gas & Electric Company	2008	Rejected by Voters	CA
Skagit County, WA	Puget Sound Energy	2008	Rejected by Voters	WA
Whidbey Island, WA	Puget Sound Energy	2008	Rejected by Voters	WA
Marin Energy Authority	Pacific Gas & Electric Company	2010	Abandoned (CCA instead)	CA
City of Egegik	Egegik Light & Power Company	2012	Completed	AK
South Daytona, FL	Florida Power & Light Co.	2012	Rejected by Voters	FL
Thurston County, WA	Puget Sound Energy	2012	Rejected by Voters	WA
Jefferson County, WA	Puget Sound Energy	2013	Completed	WA
City of Klamath Falls, OR	PacifiCorp	2013	Abandoned	OR
Santa Fe, NM	PNM Resources Inc.	2013	Considering	NM
Minneapolis, MN	Xcel Energy Inc.	2013	Abandoned	MN
Cape Coral, FL	LCEC	2014	Abandoned	FL
Island of Maui, HI	Hawaiian Electric Industries	2015	Considering	HI
Millersburg, Oregon	PacifiCorp	2015	Rejected by Voters	OR
DC Public Power	Pepco	2015	Abandoned	DC
California Electrical Utility District	PG&E, SDG&E SCE	2015	Abandoned	CA
City of Klamath Falls, OR	PacifiCorp	2016	Considering	OR
Bainbridge Island, WA	Puget Sound Energy	2017	Abandoned	WA
City of Destin, FL	Gulf Power	2017	Considering	FL
Boulder, CO	Xcel Energy Inc.	2017	Approved	CO
Pueblo, CO	Black Hills Energy	2018	Considering	CO
Decorah, IA	Interstate Power & Light	2018	Considering	IA
Davis, California	Pacific Gas & Electric Company	2018	Abandoned (CCA instead)	CA
San Francisco, CA	Pacific Gas & Electric Company	2019	Considering	CA
State of Maine	Emera and AVANGRID	2019	Initial study requested	ME

Source: Data derived from various news publications and S&P Global Market Intelligence.

3.5 MUNICIPALIZATION CASE STUDIES

The majority of the large public power agencies in the U.S. were established over a half of a century ago in the 1930s and 1940s, and therefore have an embedded cost structures that differ from a newly formed municipal utility. Consequently, the most recent municipalizations are most instructive as to the challenges of forming a municipal electric utility. Several municipalities have acquired the electric utility assets of the investor owned utility at costs that greatly exceeded original estimates. As noted, acquisition costs and operating costs are often understated which results in actual costs being higher than anticipated, diminishing meaningful savings opportunities and resulting in higher than projected municipal electricity rates. While there may be certain circumstances where a municipal acquisition of the existing electric utility can have positive outcomes for customers, there are several recent cases in which the municipality assumed significant risks and its customers faced higher costs.

WINTER PARK, FLORIDA

Costs escalated from an original estimate of $16 million to nearly $50 million by the time the takeover of the local electric system was completed.

Winter Park formed an electric utility in 2005 by acquiring the local electric distribution assets of Progress Energy, exercising a right-to-purchase clause that is unique to Florida franchise conditions. Despite agreeing to compensation being determined through arbitration rather than litigation, the effort took six years. When initially setting municipal electric rates, Winter Park held the electric rates at the same level as Progress Energy. While representing in its bond issuance an expectation to make millions of dollars a year, instead Winter Park ended up losing approximately $11 million over the first four years of municipal operation and was placed on credit-watch negative by rating agencies.[27] In 2008, Winter Park experienced decreased electric sales and an increase in the cost of bulk power, causing net revenue to decrease below the minimum 1.25 times debt service ratio to 0.73.[28]

PUBLIC UTILITY DISTRICT ("PUD") NO. 1 OF JEFFERSON COUNTY ("JPUD")

JPUD contracted a feasibility study for the purchase of the electric distribution assets owned by Puget Sound Energy ("PSE"), valuing them at approximately $47 million,[29] *which was less than half of the final acquisition cost of over $100 million, excluding start-up expenses.*

The JPUD feasibility study provided a 10-year comparison of the projected cost of continued electric service with PSE relative to the projected cost of municipal ownership. The study concluded that JPUD's rates may start out slightly higher than PSE's rates, but would drop below PSE's rates in year four, also noting the possibility of lower rates through PUD service for all 10 years.[30]

JPUD acquired the local electric distribution assets and service area of PSE in 2013, approximately five years after the acquisition was originally approved by the electorate. The actual acquisition and transaction costs incurred by JPUD were substantially higher than projected in the feasibility study.[31] Through a negotiated sale agreement with PSE, JPUD purchased the assets at a sale price of $109.3 million, or approximately 2.3 times the $47.2 million projection provided in the feasibility study.[32] In addition, actual operating costs and resulting electricity rates under JPUD operation have been higher than projected and exceed PSE's rates, altering the rate comparison with PSE originally estimated in JPUD's feasibility analysis.[33] While many advocates of municipalization had promised no rate increase and better customer treatment, JPUD's rates have increased significantly and are higher than

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27 City of Winter Park, Florida Bond Issuance Prospectus, Electric Revenue Bonds, Series 2005A and Series 2005B, Initial Auction Date June 6, 2005, C-30.

28 City of Winter Park, Florida Comprehensive Annual Financial Report, at 25.

31 Preliminary Feasibility Study (D. Hittle & Associates, Inc.), Public Utility District No. 1 of Jefferson County Electric System Acquisition, October 24, 2008, at 21.

30 *Id*., at 5.

31 JPUD did not rely on D. Hittle & Associates, Inc. for purposes of its negotiations with PSE. Rather, JPUD retained Brown & Kysar, Inc. to do a subsequent analysis. Brown & Kysar's predicted acquisition cost varied depending upon stated assumptions but ranged from $58 million to $83 million. WUTC Docket No. UE-132027 (prefiled direct testimony of Karl R. Karzmar).

32 WUTC Docket No. UE-132027, Order 04, September 11, 2014, at 1.

33 JPUD implemented two rate increases (January and June) in 2017 totaling 6.6% and another increase in 2018 of 4.8%.

PSE's rates. , In addition, JPUD has faced difficulties in customer service, accounting and low-income assistance programs.[34]

BOULDER, COLORADO

Boulder's municipalization efforts started approximately a decade and a half ago and remain unresolved. Boulder has an expected municipal utility start date of 2024, though buyout costs remain uncertain.

Boulder's costs associated with acquiring the distribution system within the city from Xcel Energy Inc. ("Xcel") have escalated considerably throughout the process, rising from less than $140 million in a 2005 preliminary feasibility study to between $300 and $337 million by current estimates depending on the range of separation costs. However, the current estimates do not include costs for stranded investments, originally estimated at $26 million (in 2018 dollars). While Boulder and Xcel remain far from determining acquisition costs for the system, Xcel and Boulder staffers estimate buyout costs could reach $900 million.[35]

Given the protracted negotiation period and ongoing court battles, estimates for legal costs have risen dramatically over the past several years. Whereas Boulder's 2005 preliminary feasibility study did not list a figure for legal costs, Boulder's 2011 final feasibility study included $3 million in legal fees. However, as of 2017, $18 million in legal costs had already been incurred, and Boulder's voters approved another $17 million to be spent over the next five years, for a total of $35 million by 2022.

3.6 RECENT PRIVATIZATIONS AND INVESTOR OWNED UTIILITY MANAGEMENT

As a result of the challenges associated with municipal electric utilities, there have also been several privatizations of municipal utilities (*i.e.*, the sale of municipal utilities to investor-owned utilities) since 2000. Figure 5 summarizes the municipal electric utilities that have recently been acquired by investor-owned utilities.

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34 Myers, Todd. "Policy Brief: The failed promises and politics of Jefferson Public Power: How creation of a public electric utility led to higher rates and lower customer service." Washington Policy Center, December 2016, at 6-7.

35 https://bldrfly.com/features/boulders-municipalization-effort-explained/; https://www.bizjournals.com/denver/news/2017/04/18/boulder-council-votes-to-move-forward-on-city.html

Figure 5: Recent Electric Privatization Activity

Utility	Municipality	Completion Year	Status	State
American Electric Power Company, Inc.	Elk City, OK	2010	Completed. Municipalized in 2004	OK
American Electric Power Company, Inc.	Valley Electric Member Corp, LA	2010	Completed	LA
Central Vermont Public Service Corp.	Readsboro, VT	2011	Completed	VT
Indiana Michigan Power Company	City of Fort Wayne, IN	2011	Completed	IN
Pacific Gas & Electric Company	Hercules, CA	2014	Completed	CA
Rocky Mountain Power	Eagle Mountain City, UT	2015	Completed	UT
Florida Power & Light Co.	Vero Beach, FL	2018	Completed. Approved by voters, approved by PSC 11/2018	FL

In addition, although not sold to an investor-owned utility, the Long Island Power Authority ("LIPA") has been forced to select an investor-owned utility to manage its assets after significant cost escalation and mismanagement.

Recent examples are described below.

VERO BEACH, FLORIDA

Vero Beach completed the privatization of its municipal electric utility in 2018, selling the utility to Florida Power & Light ("FPL"), a large investor-owned utility serving the region. Vero Beach had owned and operated its municipal utility since 1909; however, in 2009, Vero Beach's residential rates were approximately 20-30 percent higher than FPL's rates, driven by poor management and use of funds.[36] The sustained higher rates and customer complaints associated with those high rates prompted the city to pursue re-privatization, which was ultimately completed in 2018, almost a decade after starting the process.

FORT WAYNE, INDIANA

After months of negotiations, the City of Fort Wayne and Indiana Michigan Power ("I&M") signed an agreement in 2010 for I&M to take ownership of the municipality's electric system, citing an end to expensive litigation as a key benefit of the agreement. I&M had been leasing the city's assets since the 1970s, and the parties were considering renewal of the lease or full ownership by either the city or

36 https://www.psc.state.fl.us/Files/PDF/Publications/Reports/General/Comparative/December%2031,%202009.pdf

I&M. Pursuant to I&M's acquisition of the municipality's electric property completed in 2011, I&M agreed to pay the city $5 million upfront and $34.2 million over multiple years,[37]

LONG ISLAND POWER AUTHORITY, NEW YORK

LIPA was originally created under the Long Island Power Act in 1985 as a state subdivision. Cost and reliability concerns grew over time, punctuated by Superstorm Sandy, after which Long Island customers saw significant delays in power restoration. LIPA's debt costs became an onerous issue and were restructured multiple times as a result. LIPA had a debt ratio double that for comparable large public power utilities,[38] and was projecting $8 billion in debt by 2018.[39] Between 2006 and 2012, storm costs (excluding Superstorm Sandy costs) exceeded annual budgets by an average of 239 percent.

In 2013, the state enacted legislation to stabilize rates, improve service, and improve accountability at LIPA.[40] A 2015 report filed by the New York State Comptroller found that LIPA's average residential retail rate was 22 percent higher than the New York median, and 78 percent above the national median in 2013.[41] LIPA's commercial retail prices were worse, at 92 percent above the national median.[42] As a result of escalating costs and reliability issues, in 2014, LIPA was forced to select an investor-owned utility to manage its assets, choosing Public Service Enterprise Group.

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37 S&P Global, "AEP to own system, serve full Fort Wayne, Ind., territory under settlement with city" October 29, 2010.

38 https://www.osc.state.ny.us/press/releases/july15/072415.htm

39 https://www.osc.state.ny.us/reports/pubauth/lipa_by_the_numbers_7_2015.pdf

40 https://www.osc.state.ny.us/press/releases/july15/072415.htm

41 https://www.osc.state.ny.us/press/releases/july15/072415.htm

42 https://www.osc.state.ny.us/reports/pubauth/lipa_by_the_numbers_7_2015.pdf

4 PROJECTED COSTS FOR PITTSBURG TO FORM AN ELECTRIC UTILITY

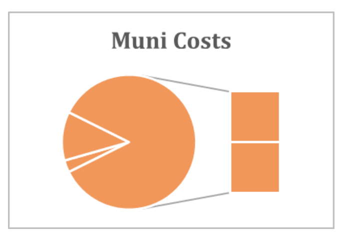
4.1 INTRODUCTION

Under the City Option, the City will incur three major categories of costs to acquire and establish a municipally-owned electric utility:

1. Acquisition Costs: the costs to the City of acquiring Evergy's physical distribution system assets (*e.g.*, distribution poles, lines, meters) at a fair market value. As discussed in Section 3, K.S.A. 26-501 to 26-519 dictate the eminent domain procedures, with K.S.A. 26-513 outlining the compensation requirements for condemned property, involving the fair market value of property as well as additional factors. K.S.A. 12-811 and 66-1,176c dictate the purchase of utility plants when the franchise has expired, while K.S.A. 66-1,176b applies when a franchise is still in effect. The analysis herein assumes that a condemnation process is pursued initially and that any negotiation, should it occur, would also result in just compensation for Evergy's assets, as determined pursuant to Kansas laws.
2. Transaction Costs: the legal, consulting, engineering, financing and other costs incurred by the City to pursue the condemnation process and close the transaction.
3. Startup Costs: the costs incurred by the City to prepare for operating an electric utility, including new systems, inventory and machinery that will be necessary to operate and maintain the distribution system, manage customer relationships, financial reporting, and provide detailed billing. In addition, the City would incur the costs associated with establishing an initial debt service reserve and funding working capital requirements.

The acquisition costs would likely be financed with taxable debt, while the transaction and startup (and ongoing operating costs discussed in Section 5) are typically financed by municipalities with tax-exempt debt.

4.2 ACQUISITION COSTS

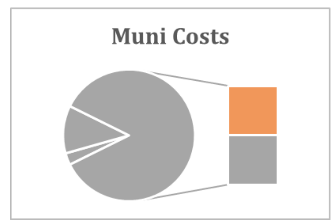


A valuation methodology is necessary to arrive at a fair value or just compensation for the various components of acquisition costs. Physical distribution utility assets are typically valued by employing a cost-based valuation methodology. Two commonly used cost valuation methodologies are Reproduction Cost Less Depreciation ("RCNLD") and Replacement Cost New Less Depreciation.

The Replacement Cost New Less Depreciation methodology estimates the cost to replace the system with new technology, then deducts depreciation to reflect the current condition of the existing assets. The Reproduction Cost New Less Depreciation approach begins with the net book value of the existing assets, which already reflects the depreciation, and escalates this net book value to current dollars. This approach is sometimes referred to as the trended net book value methodology.

The Reproduction Cost New Less Depreciation ("RCNLD") methodology often has been relied on for determining the value of the assets in an acquisition by a municipality of utility property. The RCNLD methodology develops the Reproduction Cost New ("RCN") of the assets by trending the original cost of the assets to current value using an industry-specific index. In this approach, the fair market value of the assets is determined by deducting the estimated depreciation of the assets from the RCN to establish the RCNLD. The RCNLD value represents a cost estimate to reconstruct the existing system with the same equipment currently in the system, taking into consideration the current condition of the assets. However, it is likely that it would not be possible to reconstruct the electric distribution assets in the same configuration or to apply the same development and construction practices. Some existing distribution routes might not be feasible under current regulations, and as a practical matter, it may not be possible to site all of the existing distribution lines in the same location today if they were built in areas that are currently classified as wetlands, environmentally sensitive, or are densely populated. Each of these factors increases the costs associated with approvals and construction. Even routes that are acceptable under current regulations might face local opposition if the attempt was made to establish those routes today. Therefore, the RCNLD methodology is a conservative estimate of the replacement cost new of the system.

DISTRIBUTION SYSTEM ASSET VALUATION



For this Preliminary Feasibility Study, an estimate of the value of the assets in the City is based on the RCNLD methodology. The RCN estimate was developed based on the Evergy engineering team's review of the existing system and their determination of the assets in the system that are required to serve customers in Pittsburg as of year-end 2018, identifying the original cost and vintage of installation for those assets. The initial original cost inventory of the distribution assets is trended to current dollars in order to estimate the RCN of the assets.

The original costs were trended using adjustment factors from the Handy-Whitman Index.[43],[44] The Handy-Whitman Index is a generally accepted industry standard cost index used for conducting reproduction cost studies. The Handy-Whitman Index has tracked utility labor, materials and equipment costs over time and includes specific indices for various types of utility assets that reflect the percentage change in the cost of goods in most utility plant accounts for every year from 1912 to the present, with 1973 as the base year (*i.e.*, 1973 = 100 for all asset types). Using the Handy-Whitman

[43] The Handy-Whitman Index is considered an accurate and reliable resource for valuation experts, has a long history of providing dependable data, and has been published continuously since 1924 by Whitman, Requardt and Associates, an engineering firm. The Handy-Whitman Index has been used to reflect price inflation by escalating construction costs from the investment year to current dollars. The Handy-Whitman Index has been used and is generally accepted for rate-setting purposes as well as for many other purposes. For example, it has been used to value utility property for sale purposes, to perform stock valuations, and to make ad valorem tax calculations. In addition, the Handy-Whitman Index has been used for insurance purposes and for engineering estimates of new construction project costs.

[44] The Handy-Whitman Index is used to trend most cost categories; however, the Bureau of Labor Statistics producer price index is used to trend the original cost of general equipment.

Index, an adjustment factor is calculated by dividing the index for the most recent period by the index for the vintage of the property in question. The Handy-Whitman Index reports separate indices for many regions of the United States to reflect regional cost differences and trends. For purposes of this analysis, Concentric has relied on the Handy-Whitman Index for the region of the United States that includes Kansas.

The development of the RCN analysis reflects the value of the following asset categories:

- Land and land rights[45]
- Structures and improvements
- Substation equipment
- Poles and fixtures
- Overhead conductors and devices
- Underground conduits and devices
- Line transformers
- Line capacitors
- Services equipment
- Meters, including smart meters
- Lease property on customers' premises
- Street lighting and signal systems
- Office and computer equipment
- Vehicles
- Stores equipment
- Tools, shop, and garage equipment
- Laboratory equipment
- Power-operated equipment
- Communications equipment
- Miscellaneous equipment

The original cost data is trended to a current value as of 2019 using the Handy-Whitman Index, and then escalated at inflation to 2022 to reflect the value of the utility assets as of the assumed acquisition date. This reflects approximately three years to complete the acquisition process and transition operation to the City, which is aggressive if a condemnation proceeding is required to

[45] Selected land values are reflected in the RCNLD analysis at their original cost and are not depreciated. However, an independent study commissioned by the City would be required to determine final values for Evergy's land and land rights, as well as private land easements, which are not included in the analysis.

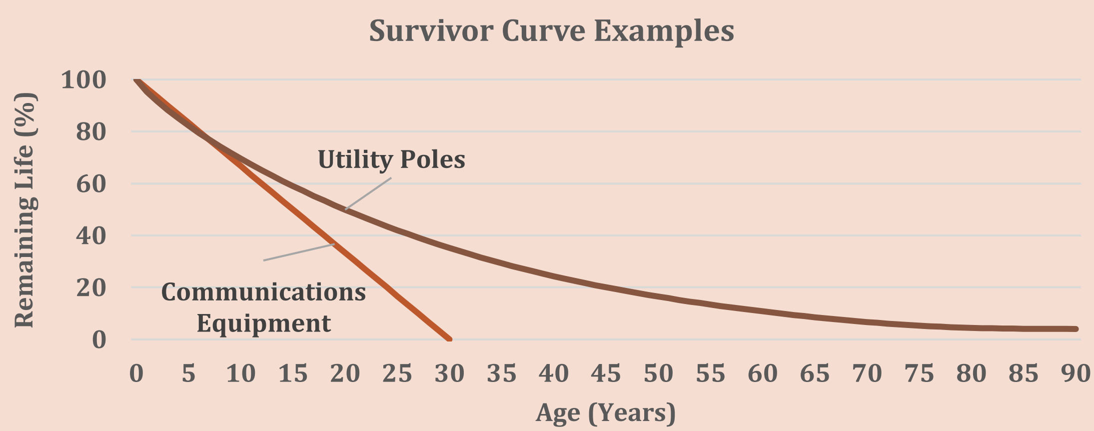
establish the level of just compensation. In addition, there would need to be sufficient time to develop a transition plan that ensures that safe reliable service could be delivered by the municipal electric utility.

In order to estimate the value of the assets as they are expected to exist at the time of sale, it is necessary to depreciate the RCN value to reflect the age and condition of the assets. Depreciation is estimated based on the expected lives of the assets as determined in Evergy's 2017 depreciation study, which was approved by the KCC in Docket 18-WSEE-328-RTS.

Steps for Distribution System Valuation

1) <u>Trend Original Cost Data</u>: Determine RCN of each Federal Energy Regulatory Commission ("FERC") account based on the original installed cost trended to current cost using cost indices (*i.e.*, the Handy-Whitman Index for most costs; and the Bureau of Labor Statistics producer price index data for general equipment, such as computers and office equipment).

2) <u>Estimate Depreciation</u>: Depreciate assets using the age and expected useful life of the asset inventory by FERC account. The age and expected useful life relied on are as determined in Evergy's 2017 depreciation. The rate of depreciation (survivor curve), or expected life, vary considerably by account, which affects the level of depreciation in each account (see chart).



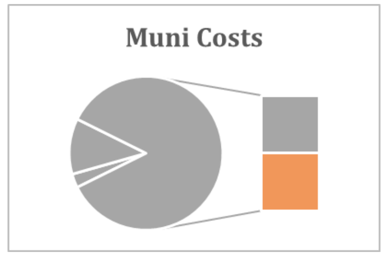
3) <u>Calculate RCNLD</u>: Apply depreciation determined in Step 2 to the RCN determined in Step 1 to calculate the RCNLD value for each FERC account.

As shown in Figure 6, the RCNLD value of the distribution assets within the City is estimated to be $51.0 million in 2022.

Figure 6: Estimated 2022 Reproduction Cost New Less Depreciation Value ($millions)

Account Description	Original Cost	RCN	Depreciation	RCNLD
Transmission Plant	$5.9	$14.1	$4.0	$10.1
Distribution Plant	$27.7	$68.0	$29.9	$38.2
General Plant	$2.6	$5.2	$2.5	$2.7
Total Electric Plant in Service	**$36.2**	**$87.3**	**$36.3**	**$51.0**

SEPARATION AND REINTEGRATION COSTS



Separation costs are the costs that would be incurred to sever service between the City and the rest of the Evergy system to create a stand-alone electric utility serving the City. Similarly, reintegration costs are those costs that would be necessary to reconnect Evergy's transmission and distribution network so that it provides comparable service to its remaining utility customers following a municipalization by the City.

Actual separation and reintegration costs resulting from a municipalization by the City would need to be established in the condemnation proceeding based on a more detailed review of Evergy's inventory of electric utility assets used to provide service to the City. Such a study would determine whether there are additional assets that are stranded because of the municipalization that have not already been accounted for in the valuation of distribution assets discussed herein. The separation and reintegration costs that have been included in this Preliminary Feasibility Study are discussed below.

> If the City were to municipalize, a detailed engineering study would be required to determine the actual separation and reintegration costs, which would likely be significantly higher than the estimates included in this Preliminary Feasibility Study.

SEPARATION COSTS

Evergy's engineering team conducted an analysis of the existing distribution system and identified assets that (i) would be acquired to serve the City; and (ii) assets that would no longer be required for either Evergy or the City as a result of municipalization. Costs associated with separating the municipal system from Evergy's system would include the City needing to acquire five substations, four switching stations, additional transmission requirements, a Pittsburg service center building, and communications equipment, as shown in Figure 7.

Figure 7: Estimated Separation Costs

Separation Costs	2022 ($million)
Substations	$34.0
Transmission	$9.9
Service Center[46]	$3.3
Communications Equipment[47]	$1.0
Total Separation Costs	**$48.2**

The box below highlights additional real estate requirements not included in the analysis that would be required in the event of municipalization, which would increase municipalization costs.

Selected additional substation real estate requirements that would need to be valued for purchase by the City:

- Site platted and zoned for perpetual substation construction & operation
- All required permits supplied (*e.g.*, Conditional Use Permits (CUP), construction permit, fence permit, entrance permit)
- All required surveys complete (*e.g.*, historical, USFWS/ KDWP/ endangered species, environmental, flood plain)
- Site to be deeded in fee to Evergy
- All required access easements
- All required T-line easements
- Minimum 175' X 175' site required for a flat bus switching station with line circuit switchers (no relaying)
- Minimum 225' X 225' site required for a flat bus switching station with line breakers (relay protection)
- Minimum 300' X 300' site required for a 4-terminal ring bus switching station with line breakers (relay protection)

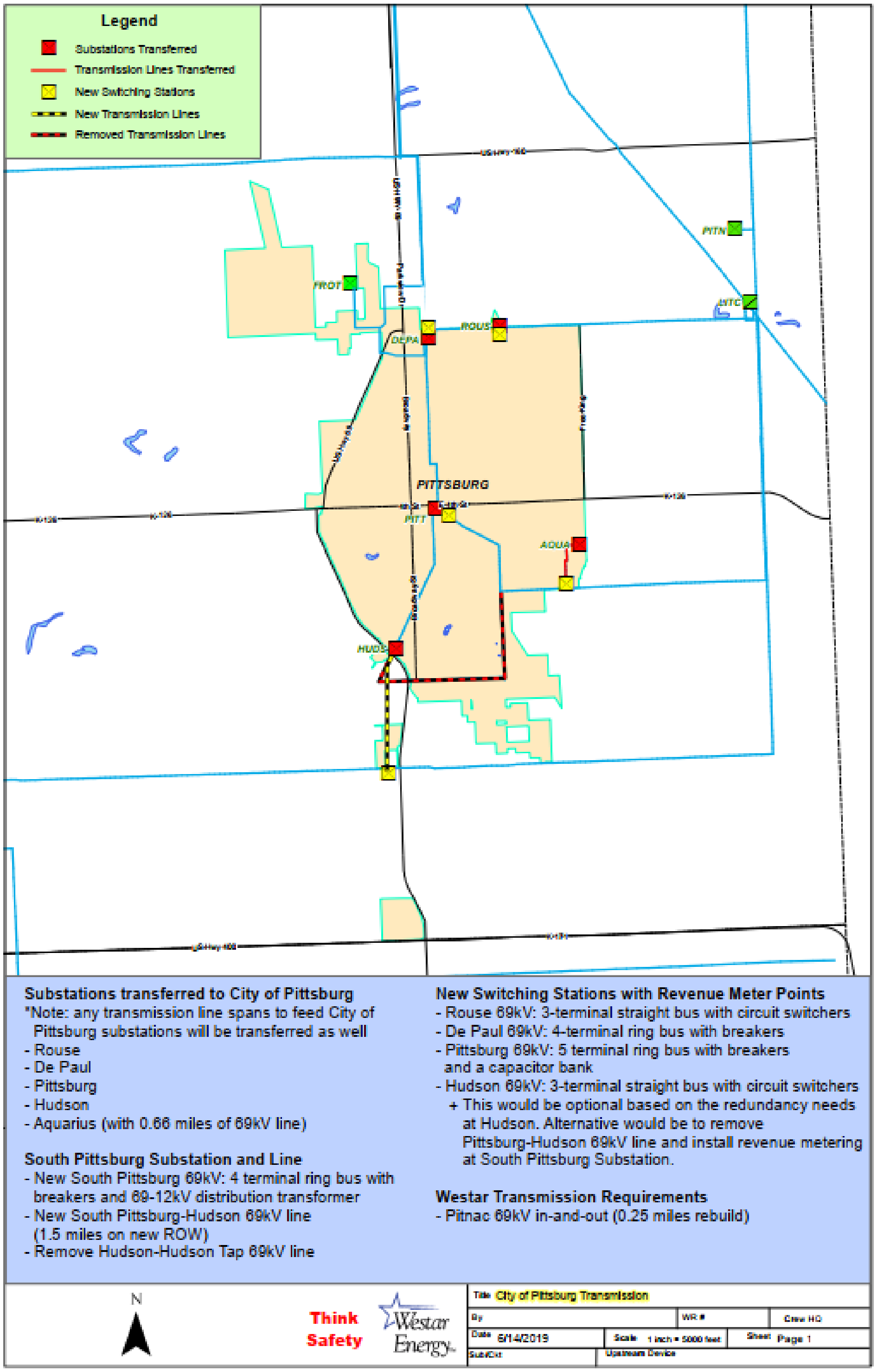
Note: These apply to any greenfield substation site supplied by the city.

46 This does not include any land purchases (depending on location and time needed to purchase) or fixtures (*e.g.*, desks, furniture, finishes). It is estimated that the fixtures alone could be an incremental $500,000 for the 30 employees who are located at the existing service center in the City.

47 The City is a hub location where Evergy currently transmits data to neighboring utilities including Empire District Electric, Public Service of Oklahoma, and others. Consequently, nine data connections would need to be relocated to an alternate site.

Figure 8 illustrates the substation and transmission transfers within the City under a municipalization scenario.

Figure 8: City of Pittsburg Municipalization Substation and Transmission Transfers



REINTEGRATION COSTS

Reintegration costs are calculated based on the number of new distribution miles needed to reconnect Evergy's existing customers outside of the City and an estimated $/mile cost for distribution line. Based on an internal review, Evergy identified the following investments that would be required to reconnect its system following a separation by the City:

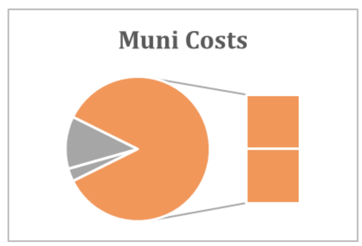
- 19 miles of feeder lines to tie substations together and disconnect Evergy customers from Pittsburg customers;
- Three primary meters to serve isolated Pittsburg load, the Airport, an industrial park southwest of the City, and the Casino; and
- Two voltage regulators stations, and four mid circuit reclosers.

There are at least two approaches for reintegrating the Evergy system following municipalization of Pittsburg: relying on Evergy's labor or contracting with a third-party company for labor. The Evergy engineering team provided estimated costs using both internal and external resources. Figure 9 summarizes those estimates. Based on Evergy's engineering estimate, it is estimated that the cost using contract labor would be approximately $700,000 less expensive. Therefore, this more conservative cost estimate is utilized in the analysis.

Figure 9: Estimated Reintegration Costs

Reintegration Costs	2022 ($million)
Evergy Labor Option	$8.7
Contract Labor Option	$8.0

SUMMARY OF ACQUISITION COSTS

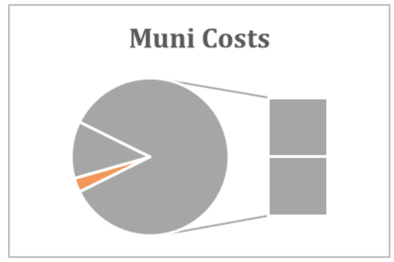


As shown in Figure 10, Concentric estimates the acquisition costs at $107.1 million based on a transaction closing in 2022. This valuation is a preliminary estimate that would need to be refined after conducting a complete system inventory. As mentioned earlier, these costs do not include several land parcels and easements, and a final valuation of these parcels would require an independent study commissioned by the City, which would likely increase the acquisition costs estimated herein.

Figure 10: Preliminary Estimate of Total Acquisition Costs

Asset Category	2022 ($million)
Distribution Assets	$51.0
Separation Costs	$48.2
Reintegration Costs	$8.0
Total	**$107.1**

4.3 TRANSACTION COSTS



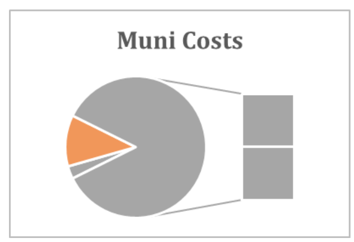
The City would incur legal, consulting, and financing costs to pursue the condemnation process and close the transaction. As noted, the legal process for establishing the acquisition price of the system can be a lengthy process that involves several legal and regulatory authorities, particularly if the outcome is determined through condemnation rather than negotiation. As shown in Figure 11, legal and consulting costs are estimated to be $3.0 million; however, considering the experiences of other municipalization efforts, this estimate is likely to be conservative.

Figure 11: Estimated Transaction Costs

Transaction Costs	2022 ($million)
Legal/Consulting Costs	$3.0
Flotation Costs	$0.8
Total	**$3.8**

Concentric has estimated that financing or underwriting fees (known as flotation costs) would be approximately 1.5 percent of the borrowed amount, or $0.8 million. These fees are associated with the taxable debt to fund the acquisition of the assets and the tax-exempt debt used to fund transaction fees, startup costs, acquisition costs, working capital, and an initial debt issuance to fund the first few years of capital expenditures.

4.4 STARTUP COSTS



The City would also incur certain one-time startup costs that are necessary to operate a newly formed municipal electric utility. Figure 12 summarizes the estimated startup costs by category. These estimates are based on a combination of Concentric's expertise and analysis of industry trends.

First, the inventory cost assumes 3.00 percent of the estimated RCNLD value discussed previously (*i.e.*, the $51.0 million). Second, the operations startup costs are estimated by calculating a $/customer startup cost using projections made in the analyses prepared by Boulder, Colorado.[48] Third, the City will also need to have access to capital to make the necessary replacements to the distribution system if ownership is assumed. For purposes of this analysis, the initial capital expenditure fund for the first four years is estimated using the replacement capital rate of 2.3 percent

48 Concentric estimated the customer star-up costs including only the cost categories of Facilities, Fleet and half of the information technology expenditures that were estimated by Boulder, Colorado in its Financial Forecast Tool User Manual and Documentation, p. 27. The Preliminary Feasibility Study assumes that the City would acquire sufficient assets and would not need to acquire additional real estate or buildings for office space, operations, or a service center.

from Evergy's most recent depreciation study and applying that rate to the base year investment in the assets. Fourth, the City would need to establish a debt service reserve fund roughly equivalent to one year of interest and principal associated with acquisition-related borrowings, which are described in Section 5.3. Lastly, cash working capital, representing 45 days of working capital to cover cash expenses related to power purchases, transmission and O&M expenses, is also reflected in the startup costs. Based on these estimates, the total startup costs are estimated to be approximately $15.0 million.

Figure 12: Estimated Startup Costs

Startup Costs	2022 ($million)
Inventory @ 3% of Total	$1.5
Operations Startup Costs	$2.0
Initial Capital Expenditure Fund for First 4 Years	$4.8
Initial Debt Service Reserve	$3.0
Interest on Reserve Fund	$0.1
Working Capital	$3.6
Total	**$15.0**

4.5 TOTAL ESTIMATED COSTS FOR THE CITY TO ACQUIRE EVERGY'S DISTRIBUTION ASSETS

Figure 13 summarizes the three categories of costs that would be incurred under the City Option. The total costs are estimated to be approximately $125.9 million. [49]

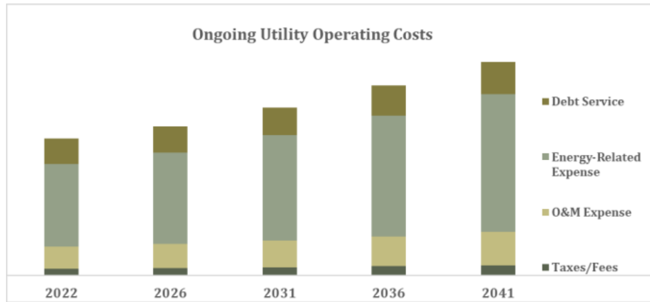
Figure 13: Estimated Costs for the City to Form a Municipal Utility

Cost Category	2022 ($million)
Acquisition Costs	$107.1
Transaction Costs	$3.8
Startup Costs	$15.0
Total	**$125.9**

[49] These costs reflect what is referred to herein as the Base Case; alternative scenario analyses are discussed in Section 7.

5 PROJECTED COSTS FOR PITTSBURG TO OPERATE AN ELECTRIC UTILITY

5.1 INTRODUCTION

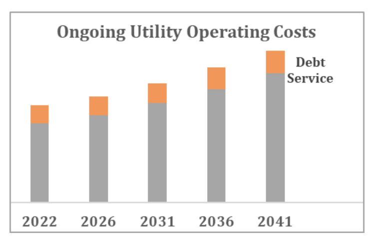


The going forward costs of operating a municipal utility is referred to as the "cost of service" or "revenue requirement". The Preliminary Feasibility Analysis assumes that an acquisition would occur at the start of 2022, and that the City will replicate the services and funding currently provided by Evergy. The City's projected operating costs are evaluated over the 20-year Forecast Period (*i.e.*, 2022 through 2041).

5.2 PITTSBURG ELECTRIC UTILITY REVENUE REQUIREMENT

The annual operating expenses that the City would incur include debt service costs associated with forming the municipal utility, power supply costs (the cost of purchased power and associated transmission expenses), O&M expenses and taxes/fees previously paid by Evergy to the City and collected in utility rates. Many of these costs are affected by the number of customers served, the customers' total energy usage, and the system peak demand requirements. For purposes of this analysis, it is assumed that utility load growth is 0.61 percent per year, reflecting the compound annual growth rate in load over the past ten years for the City. In addition, utility customer count growth is assumed to be 0.25 percent, which reflects the compound annual growth rate in customers over the past ten years. Evergy's customers in the City as of the end of 2018 totaled 10,621.

5.3 DEBT SERVICE



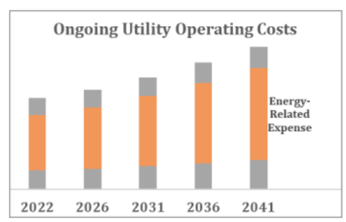
As discussed in Section 4, the City is projected to need to raise capital to fund the estimated acquisition costs ($107.1 million), transaction costs ($3.8 million) and startup costs ($15.0 million). It is Concentric's understanding that the acquisition of investor-owned utility assets for the purposes of establishing a new municipal utility would likely be required to be financed with taxable debt. Typically, the financing structure is that the municipal utility debt would be guaranteed based on the revenues of the utility, not the general obligation of the taxpayers of the community. Therefore, the transaction would be financed with revenue bonds. Other costs associated with the formation of a new municipal utility, including startup costs, inventory, working capital, and legal and consulting fees can be financed with tax-exempt debt. It is assumed that both tax-exempt debt and revenue bonds would be issued for a term of 30 years.[50]

Annual debt service costs would be determined by the amount to be financed, the relevant interest rate and the assumed credit rating of the new municipality. Since the Preliminary Feasibility Analysis assumes that the acquisition of the assets would occur in 2022, it it necessary to estimate the financing costs at the time of the acquisition. The interest rate for taxable debt is based on the projected 30-year U.S. Treasury bond yield for 2020-2029 of 3.70 percent plus the spread between the historical average 30-year Treasury yield and the average Moody's BAA-rated utility debt yield, or a historical spread of 1.55 percent.[51] The result of this analysis is a projected taxable bond rate of approximately 5.25 percent.

The interest rate differential (spread) between taxable revenue bonds and tax-exempt bonds is based on a comparison of taxable and tax-exempt debt. Concentric reviewed the interest rates for long-term debt issued by municipalities in Kansas over the last several years. Comparing bond rates for taxable and tax-exempt debt issued by the same utility for the same duration normalizes the results for differences in interest rates due to varying borrowing lengths and utility credit ratings. This analysis indicates that the spread between taxable and tax-exempt debt for issuances of similar term and credit rating is 111 basis points. Based on this spread, it is assumed that the tax-exempt debt rate is 4.14 percent.

5.4 POWER SUPPLY EXPENSES

PURCHASED POWER



Acquiring power, either through third-party purchases or through self-generation, is the largest component of the revenue requirement for any municipal electric utility. Power supply costs in the City Option are estimated based on projected market prices of power over the Forecast Period. In other words, it is assumed that long-term average power supply costs for the City would approximate the projected cost of power at market rates.

There are two components to the purchased power costs that are estimated to derive an "all-in" cost of power: (i) energy-only costs; and (ii) capacity, ancillary, and other charges.

50 Shorter financing terms could be achieved and may provide for lower borrowing costs; however, the annual debt service would be higher to reflect the prepayment of principal over fewer years.

51 The historical 30-year treasury yield averaged 2.99 percent from January 1, 2017 through May 31, 2019 (Bloomberg Finance). The historical Moody's BAA-rated utility debt yield averaged 4.55 percent (Bloomberg Finance). The difference between these two indicates a historical spread of approximately 1.55 percent (reflects difference due to rounding). The projected yield on the 30-year U.S. Treasury Bond of 3.70 percent was derived from Blue Chip Financial Forecasts, Vol. 38, No. 6, June 1, 2019, at p. 14.

Energy-Only Costs: To estimate the cost of the City's future energy requirements, Concentric relied on an energy price forecast for SPP produced by Argus for the 2020 through 2029 period. After 2029, the forecast was escalated at inflation for the remainder of the 20-year Forecast Period.

Capacity, Ancillary, and Other Charges: In order to estimate the cost of capacity, ancillary, and other charges, Concentric reviewed actual historical power supply costs for other municipal electric utilities in Kansas. Specifically, Concentric 's analysis was developed in the following manner:

- *Step One: Determine Historical All-In Power Costs*. Concentric examined all-in power supply costs for various municipal electric utilities in Kansas as stated in their respective financial statements in 2017. Based on this analysis, the median all-in power supply cost for these municipal utilities was approximately $63/MWh, which was relied on as a proxy for the all-in power costs of a Pittsburg municipal electric utility.

- *Step Two: Determine Historical Energy-Only Costs*. Concentric also reviewed the 2017 historical market price for energy for the region, which averaged $26/MWh on an all-hours basis.

- *Step Three: Interpolate the Cost of Capacity, Ancillary and Other Charges*. Using the historical median all-in power supply cost and the historical actual energy-only cost, Concentric interpolated the cost of capacity, ancillary services and other costs. The resulting estimated cost of capacity, ancillary and other charges is approximately $36/MWh, or the difference between the $63/MWh of all-in power supply cost and the $26/MWh energy-only cost. The interpolated capacity and other charges portion of the power supply cost is escalated at inflation.

The forecast of power supply costs under the City Option combines the energy and non-energy components of the power supply costs (expressed on a $/MWh basis). The forecasted all-in power supply cost uses the market price projections for energy and the escalated cost of capacity, ancillary and other costs. Total power supply cost in 2022 under the City Option is estimated by multiplying the all-in power supply rate by the projected Pittsburg retail electric load as grossed up for line losses. In 2022, the estimated total power supply cost is $20.6 million.

Figure 14: Estimated Purchased Power Costs

Year	Power ($/MWh)	Replacement Power Cost ($Million)
2022	$67.65	$20.6
2023	$68.15	$20.9
2024	$69.53	$21.5
2025	$71.10	$22.1
2026	$72.70	$22.7
2027	$74.35	$23.4
2028	$76.02	$24.1
2029	$77.75	$24.8
2030	$79.38	$25.4
2031	$81.05	$26.1
2032	$82.75	$26.8
2033	$84.49	$27.6
2034	$86.26	$28.3
2035	$88.08	$29.1
2036	$89.92	$29.9
2037	$91.81	$30.7
2038	$93.74	$31.5
2039	$95.71	$32.4
2040	$97.72	$33.3
2041	$99.77	$34.2

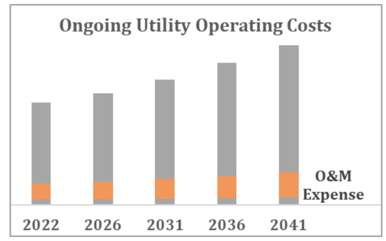
TRANSMISSION EXPENSE

Under the City Option, the City would also incur costs associated with the use of Evergy's open access transmission system to deliver power to the interconnection with the City. The transmission expense is commonly calculated based on a region's peak load during a specific period (*e.g.*, annual peak load). The peak load data for the City was not available. Therefore, Concentric calculated the average transmission expense per MWh for Evergy's entire distribution system, and then applied a proportion of the annual transmission costs to the City based on Pittsburg's load as a percentage of Evergy's total load.

Figure 15: 2022 Estimated Transmission Costs

Transmission Costs	
Evergy Transmission Cost ($/MWh)	$9.12
Pittsburg Electric Sales + Line Losses (MWh)	305,126
Pittsburg Transmission Cost ($Million)	$2.8

5.5 NON-FUEL O&M EXPENSES

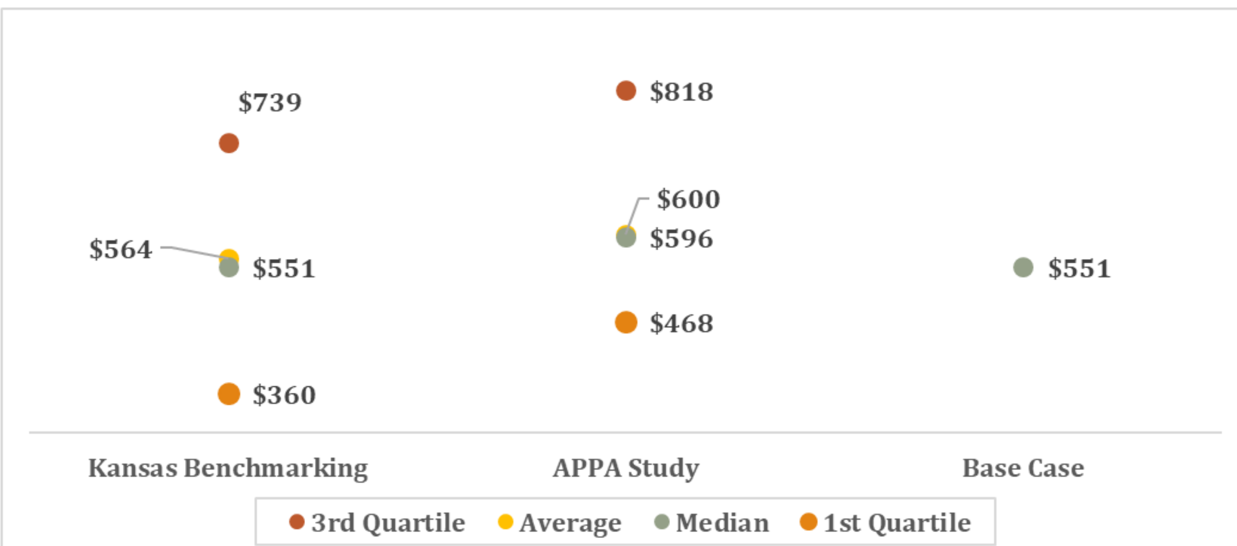


The City would also be required to operate and maintain its electric distribution system if it were to municipalize. The O&M costs that would be incurred in the City Option are based on benchmarking similar costs incurred by the municipal utilities in Kansas. According to S&P Global Market Intelligence, Kansas has 102 municipal electric utilities,[52] and the financial statements and budgets for all but one of these utilities[53] were reviewed to develop metrics regarding the operations and maintenance costs experienced for municipal utilities on a per-customer basis. Based on this review, there were 35 municipal utilities for which there was comparable non-fuel O&M data reported, including administrative and general expenses, which is used to derive a range of O&M expense per customer. This O&M expense per customer is then applied to the number of customers in the City to estimate the first-year cost estimates for operating and maintaining a municipal utility in Pittsburg.

In addition to the data reported by the municipal utilities in Kansas, Concentric also reviewed a 2017 report prepared by the American Public Power Association ("APPA") that includes national and regional financial benchmarks of selected public power utilities across the U.S.[54]

Figure 16 summarizes the results of the municipal utility O&M benchmarking analysis and the O&M data presented in the APPA report.

Figure 16: Range of O&M Expenses Based on Benchmarking Metrics ($/customer)



As shown, the O&M costs per customer resulting from the Kansas municipal utility benchmarking analysis are slightly lower than the per customer costs reported in the APPA study. For purposes of

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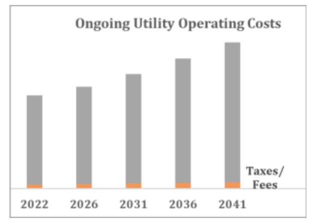
52 S&P Global Market Intelligence.

53 Concentric was not able to locate information for the City of Arma, KS.

54 APPA, Financial and Operating Ratios of Public Power Utilities, December 2017, p. 24, Table 10, "Southwest" region.

the Preliminary Feasibility Study, the O&M expense per customer represents the median from the Kansas municipal utility benchmarking analysis of $551/customer. The first-year O&M costs are escalated at inflation throughout the Forecast Period. The use of the results from the Kansas municipal utility benchmarking study are similar to the APPA findings but provide a more conservative estimate of expenses that the City would incur to operate and maintain the electric system. The non-fuel O&M expense estimated for the City Option is also adjusted to account for growth in the number of customers in Pittsburg over the Forecast Period. As described in Section 5.2, it is assumed that there would be customer count growth of 0.25% per year, reflecting the compound annual growth rate in Pittsburg's customer count over the last 10 years.

5.6 PROPERTY TAXES AND OTHER FEES



As a private corporation, Evergy pays property taxes on the assessed value of its assets located in Pittsburg. These taxes are included as an expense in Evergy's revenue requirement and are reflected in the calculation of distribution rates paid by all Evergy customers. Property tax payments by Evergy benefit the City. If Pittsburg were to own and operate an electric utility, Evergy would no longer pay property taxes or franchise fees to the City. Therefore, in order to continue to fund the City operations at the existing levels, it is necessary to also assume that the municipal electric utility would provide a "payment in lieu of taxes" to the City's general fund to replace these revenue sources that are currently supplied through Evergy's rates. As shown in Figure 17, the combination of these taxes and fees represent approximately $1.6 million annually in revenue for the City. This cost is assumed to escalate at the rate of inflation throughout the Forecast Period if the City were to municipalize the electric distribution system, meaning the City would be required to replace approximately $1.8 million in revenues associated with property taxes and franchise fees by 2022.

Fees Impact

Moving to a municipal electric utility, the City of Pittsburg would forego $1.8 million in 2022 in property taxes and fees paid by Evergy to the City. For context, that equates to roughly 38% the city's 2018 annual debt service payment, or 84% of the 2018 parks and recreation budget.

Source: Pittsburg 2018 city budget, pp. 21-22.

Figure 17: Evergy Property Taxes and Fees Paid to the City of Pittsburg

Taxes and Fees	2015	2016	2017	2018
City of Pittsburg Property Taxes	$0.2	$0.2	$0.2	$0.2
Franchise Fees	$1.3	$1.4	$1.4	$1.4
Total	**$1.5**	**$1.6**	**$1.6**	**$1.7**

5.7 PROJECTED REVENUE REQUIREMENT FOR THE CITY OPTION

Based on the analysis and assumptions described herein, Figure 18 summarizes the projected revenue requirement for municipal electric utility service over the 20-year Forecast Period.

Figure 18: Projected Municipal Revenue Requirement Under the City Option

Revenue Requirement ($mm)	Year 1 (2022)	Year 5 (2026)	Year 10 (2031)	Year 15 (2036)	Year 20 (2041)
Debt Service					
Principal	$1.0	$1.3	$1.6	$2.1	$2.8
Interest	$5.6	$5.6	$5.6	$5.5	$5.2
Subtotal - Debt Service	**$6.6**	**$6.9**	**$7.2**	**$7.6**	**$8.0**
Energy-Related Expenses					
Power ($/MWh)	$67.6	$72.7	$81.0	$89.9	$99.8
Transmission ($/MWh)	$9.1	$9.9	$11.0	$12.2	$13.5
Subtotal - Energy Expense ($/MWh)	$76.8	$82.6	$92.0	$102.1	$113.3
Pittsburg Sales + Line Losses (MWh)	305,126	312,640	322,292	332,243	342,501
Subtotal - Energy-Related Expense	**$23.4**	**$25.8**	**$29.7**	**$33.9**	**$38.8**
Operation and Maintenance Expense					
Subtotal - O&M Expense	**$5.9**	**$6.5**	**$7.3**	**$8.2**	**$9.2**
Taxes and Fees					
Payments in Lieu of Taxes	$0.2	$0.3	$0.3	$0.3	$0.4
Franchise Fee	$1.6	$1.7	$1.9	$2.1	$2.3
Subtotal - Taxes and Fees	**$1.8**	**$2.0**	**$2.2**	**$2.4**	**$2.7**
Total Cost of Municipal Ownership					
Total Cost of Municipal Ownership	**$37.7**	**$41.2**	**$46.3**	**$52.1**	**$58.6**

6 FORECAST OF EVERGY REVENUE REQUIREMENTS AND RATES

The assessment of the financial feasibility of a City municipal electric utility also depends on the projected electric rates that Pittsburg customers would pay should Evergy continue to serve Pittsburg (*i.e.*, the Evergy Option). This section summarizes the assumptions used to project Evergy's future retail electric rates under the Evergy Option.

Changes to Evergy's retail rates are approved by the KCC and occur primarily through rate proceedings that reflect changes in the cost of providing service, the number of customers and the energy demand of the customers. Changes to the costs of providing electric service determine the revenue requirement that rates will be designed to collect, while changes to the number of customers and energy demand affect how the revenue requirement is allocated to each class of customers (*e.g.*, residential, commercial, industrial) and, in turn, the calculation of the specific rates that appear on customer bills.

Based on data provided by S&P Global Market Intelligence, Figure 19 summarizes the completed Westar and KCP&L rate proceedings since 2000. Since Westar and KCP&L merged in 2018, the rate history of KCP&L was reviewed in addition to that of Westar.

Figure 19: Westar and KCP&L Past Rate Proceedings (2000-2018)

Company	Docket No.	Initial Filing Date	Rate Case Completion Date	Rate Case Duration (Months)	Embedded Cost of Debt (%)	Requested Rate Change / Revenue (%)	Authorized Rate Change / Revenue (%)
Westar	D-01-WSRE-436-RTS (WR)	11/27/2000	7/25/2001	8	7.55	19.00	4.40
Westar	D-05-WSEE-981-RTS (WR)	5/2/2005	12/28/2005	8	6.19	9.00	4.60
Westar	D-08-WSEE-1041-RTS (WR)	5/28/2008	1/21/2009	7	N/A	15.00	11.00
Westar	D-09-WSEE-925-RTS (WR)	6/2/2009	1/27/2010	7	6.57	1.50	1.30
Westar	D-12-WSEE-112-RTS	8/25/2011	4/18/2012	7	N/A	5.85	3.22
Westar	D-13-WSEE-629-RTS	4/15/2013	11/21/2013	7	6.62	1.70	1.60
Westar	D-15-WSEE-115-RTS	3/2/2015	9/24/2015	6	N/A	12.40	9.70
Westar	D-17-WSEE-147-RTS	10/26/2016	6/8/2017	7	N/A	0.80	0.80
Westar	D-18-WSEE-328-RTS	2/1/2018	9/27/2018	7	4.71	3.40	-2.50
Westar Average						*7.63*	*3.79*
KCP&L	D-06-KCPE-828-RTS	1/31/2006	12/4/2006	10	N/A	10.60	7.20
KCP&L	D-07-KCPE-905-RTS	3/1/2007	11/20/2007	8	N/A	10.80	6.40
KCP&L	D-09-KCPE-246-RTS	9/5/2008	6/24/2009	9	N/A	17.50	14.40
KCP&L	D-10-KCPE-415-RTS	12/17/2009	11/22/2010	11	6.76	10.60	4.60
KCP&L	D-12-KCPE-764-RTS	4/20/2012	12/13/2012	7	6.41	12.90	6.70
KCP&L	D-14-KCPE-272-RTS	12/9/2013	7/17/2014	7	N/A	2.20	2.20
KCP&L	D-15-KCPE-116-RTS	1/2/2015	9/10/2015	8	5.54	10.50	7.50
KCP&L	D-17-KCPE-201-RTS	11/9/2016	6/6/2017	6	N/A	-0.50	-0.60
KCP&L	D-18-KCPE-480-RTS	5/1/2018	12/13/2018	7	4.92	4.65	-0.68
KCP&L Average						*8.81*	*5.30*

Concentric projected the revenue requirement increases for Evergy over the remainder of the 20-Forecast Period (after the rate freeze) by estimating the timing of future rate proceedings and the average expected increase for each such future proceeding. Concentric analyzed historical trends of rate proceedings in the SPP region as the basis for projecting the frequency and magnitude of future Evergy retail electric rates. This analysis included over 500 completed rate proceedings in the SPP region, including over 380 cases with data on the magnitude of authorized rate changes.[55]

Figure 20: Average Frequency and Magnitude of Rate Case Increases in SPP

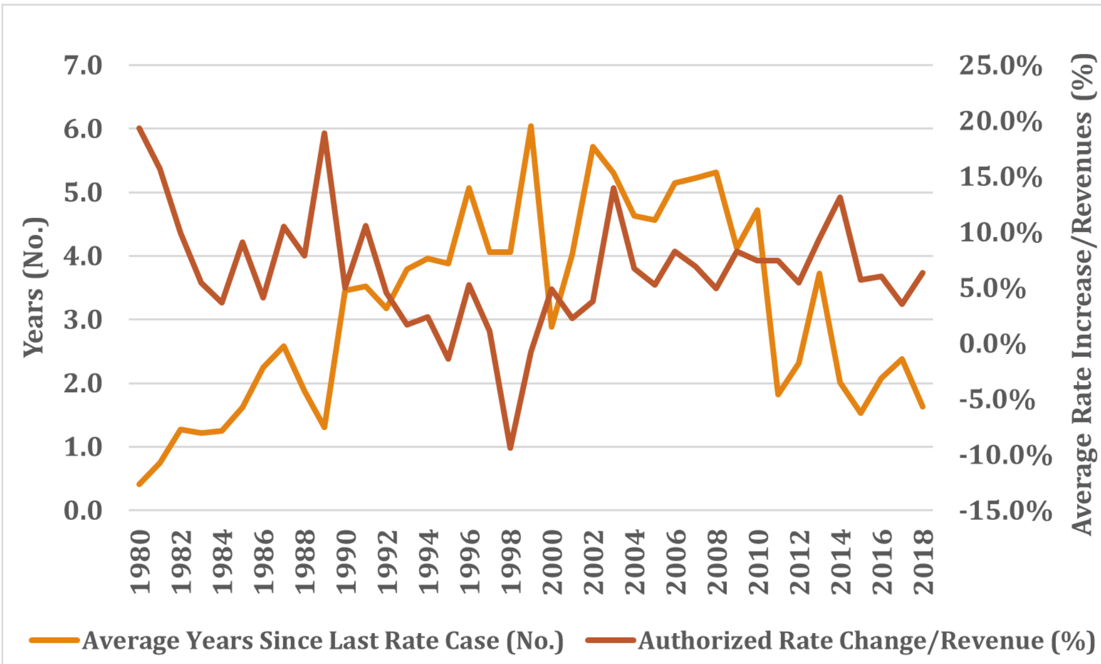
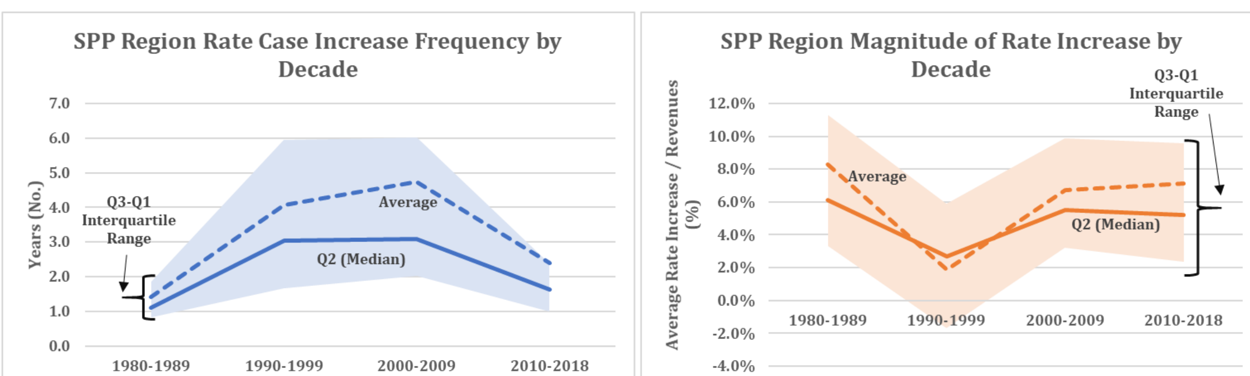


Figure 21: Frequency and Magnitude of Rate Case Increases in the SPP Region by Decade



55 Analysis includes the following states: Arkansas, Kansas, Louisiana, Missouri, New Mexico, Oklahoma, and Texas. This analysis reflects base rate proceedings and limited-issue rider cases for both electric and gas utilities. All data from S&P Global Market Intelligence.

The median of the historical rate increases of 5.29 percent over the period 2000-2018 for the SPP region is used for purposes of estimating the future magnitude of rate increases under the Evergy Option. The frequency and magnitude of future Evergy rate changes for this analysis is based solely on the analysis of historical regulatory trends in SPP and is not based on Evergy's expectations regarding its future retail electric rates. Rates in the Evergy Option are also assumed to be held constant through 2023 as stipulated in the Westar/KCP&L merger. The frequency of rate increases is assumed to be every three-years based on the average duration between rate cases for the SPP region over the same time period.[56]

Figure 22: Estimated Rate Increase and Frequency in Evergy Option

Rate Increase (%)	Frequency (Years)
5.29%	3

[56] While Evergy's base distribution rates are frozen through 2023, the remaining components of Westar's rates (*i.e.*, the retail energy cost adjustment, transmission delivery charge, and property tax surcharge) are not. Thus, while the analysis herein reflects a base distribution rate freeze through 2023, the other components of Westar's rates are assumed to adjust annually, including during the period when the base distribution rates are frozen.

7 PRELIMINARY FEASIBILITY STUDY FINANCIAL RESULTS

7.1 INTRODUCTION

The financial feasibility of the City Option is assessed by comparing the acquisition and operating costs of municipal ownership and operation to the estimated future costs of continued service by Evergy under the Evergy Option. The financial feasibility of the City and Evergy Options are considered through the Base Case and two alternative scenarios that reasonably bound the results of the study (referred to herein as the "Low Cost" and "High Cost" scenarios). The assumptions discussed in Sections 4, 5 and 6 focus on the basis for the Base Case assumptions. In addition to the Base Case, the two additional scenarios are developed to provide insights into the range of potential outcomes from establishing a municipal electric utility. Each scenario represents an internally consistent and integrated set of key assumptions as shown in the table below.

Figure 23: Key Scenario Assumptions

Assumption	Base Case	High Cost Scenario	Low Cost Scenario
Power Supply Cost Change from Base Case (%)	N/A	+10.00%	-10.00%
Non-Fuel O&M Costs (2022$/customer)	$551	$739	$360
Legal Costs (2022$ million)	$3.0	$5.0	$1.0
Startup Costs (2022 million)	$2.0	$2.9	$1.2
Evergy Rate Increase (every 3 years) (%)	5.29%	2.80%	6.97%

Power Supply: The power supply cost changes in the High and Low Cost scenarios are based on a reasonable band of expected changes in costs.

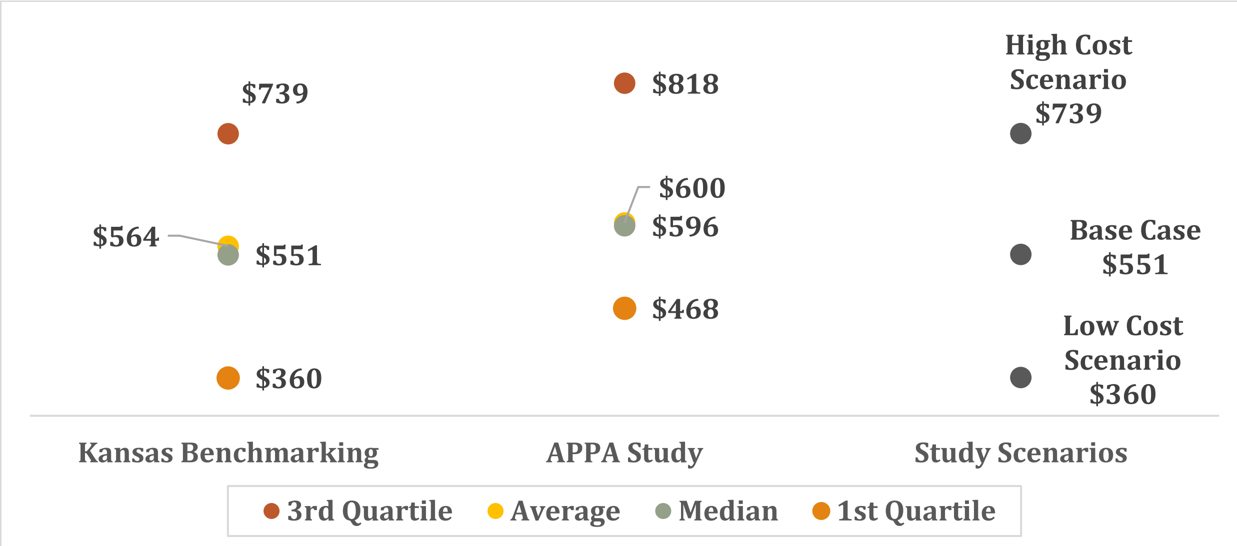
Non-Fuel O&M: As discussed previously, the non-fuel O&M costs in the Base Case are based on benchmarking analysis, and so too are the O&M costs for the High Cost and Low Cost scenarios. As shown in Figure 24, the Kansas municipal utility benchmarking study results in all three scenarios are lower than the per customer costs reported in the APPA study. These O&M figures in each scenario are escalated at inflation throughout the Forecast Period.

Legal Costs: The legal costs in the High and Low Cost scenarios are based on a reasonable band of potential changes in such costs.

Startup Costs: The operations startup costs are estimated by calculating a $/customer startup cost using City of Boulder's Financial Forecast Tool User Manual and Documentation, including only he "Facilities" and "Fleet" categories. While the Base Case assumes half the IT expenditures on a $/customer basis, the High Cost Scenario assumes the full value of the IT expenditures on a $/customer basis, and the Low Cost Scenario eliminates the IT expenditures.[57]

[57] City of Boulder, Financial Forecast Tool User Manual and Documentation, p. 27.

Figure 24: Range of O&M Expenses Based on Benchmarking Metrics ($/customer)



Evergy Rate Increase: As shown in Figure 25, Concentric determined the expected rate increase for the Base Case, High Cost Scenario, and Low Cost Scenario from the 2000-2018 range for the SPP region. As mentioned, the three-year rate case frequency was the average of the region in that time period and is used in all scenarios. The Base Case represents the median rate increase over the time period (5.29%), the High Cost Scenario represents the first quartile (2.80%), and the Low Cost Scenario represents the average rate increase (6.97%). Because the Evergy Option is compared against the City Option for purposes of evaluating financial feasibility of municipalization, a lower Evergy rate increase in the Evergy Option results in higher risk for a Pittsburg municipal utility (the High Cost Scenario), and a higher Evergy rate increase signifies lower risk to a Pittsburg municipal utility (the Low Cost Scenario).

Figure 25: Evergy Expected Rate Increase Based on SPP Region Analysis

Description	Rate Increase (%)	Frequency (Years)
Base Case	5.29%	3
High Cost Scenario	2.80%	3
Low Cost Scenario	6.97%	3

A major driver affecting the costs of operating a municipal electric utility is the time required for a transition from Evergy operation of the electric utility to a City municipal electric utility. The uncertainty with respect to timing is attributable to the initiation and duration of a condemnation proceeding. As described in Section 3.4, the duration of the effort to establish a municipal electric utility can be many years depending on the regulatory and legal process, and extent of disagreement between the parties. The costs to be incurred both with the acquisition and operation of the utility property will increase as the duration is extended due to higher legal and consulting fees leading up to an acquisition, and continued escalation of both capital and operating costs. Concentric has assumed that the transition occurs in 2022 in the Base Case, Low Cost Scenario, and High Cost Scenario.

In addition to the High Cost and Low Cost scenarios in which multiple key assumptions are changed together, additional insights are provided by testing the sensitivity of the Base Case results through a change in a single assumption. These scenario and sensitivity analyses combine to provide a more robust understanding of the potential financial feasibility of a municipal electric utility than is possible by limiting the assessment to a single Base Case.

7.2 BASE CASE RESULTS

Figure 26 compares the Base Case revenue requirement under the City Option beginning in 2022 to the Base Case projected revenue under the Evergy Option. As shown, there is estimated to be a net present value financial loss of $106.9 million over the 20-year Forecast Period from municipal ownership and operation of the electric utility as compared with a continuation of service with Evergy.

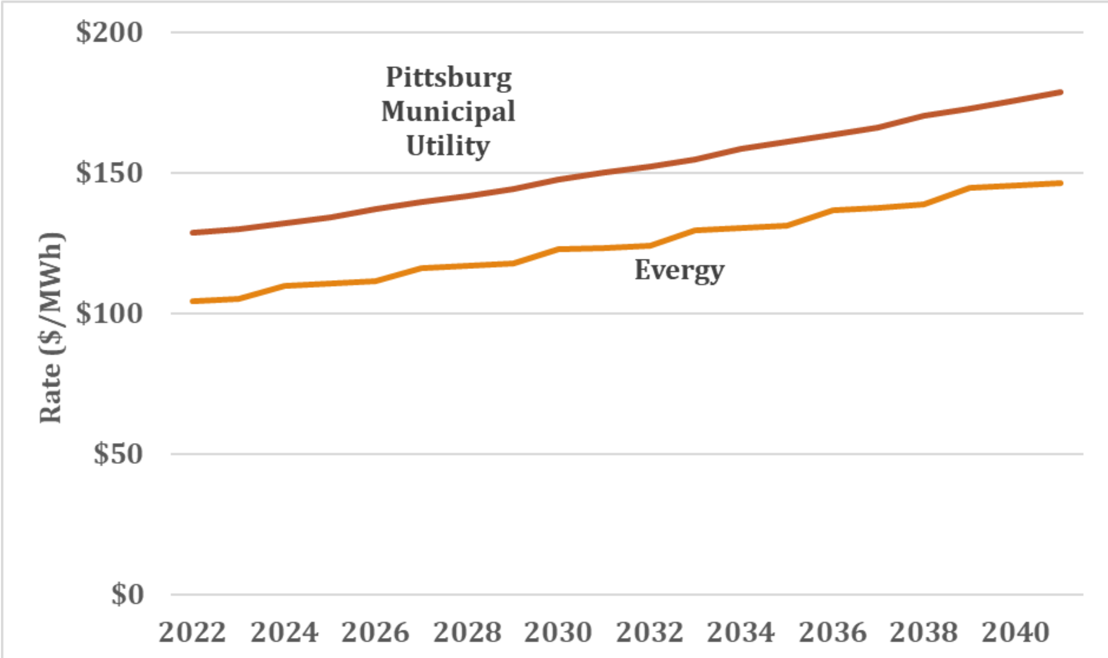
Figure 26: Base Case: 2022 Transition

Revenue Requirement ($mm)	Year 1 (2022)	Year 5 (2026)	Year 10 (2031)	Year 15 (2036)	Year 20 (2041)
Evergy					
Estimated Rate Revenue	$30.6	$33.4	$38.1	$43.6	$48.1
City of Pittsburg Municipal Electric Cost of Service					
Debt Service (Principal & Interest)	$6.6	$6.9	$7.2	$7.6	$8.0
Energy-Related Expenses	$23.4	$25.8	$29.7	$33.9	$38.8
O&M Expenses	$5.9	$6.5	$7.3	$8.2	$9.2
Taxes and Fees	$1.8	$2.0	$2.2	$2.4	$2.7
Total Municipal Cost	**$37.7**	**$41.2**	**$46.3**	**$52.1**	**$58.6**
City Estimated Savings ($/Year)	*($7.1)*	*($7.8)*	*($8.2)*	*($8.5)*	*($10.5)*
Net Present Value (10 Years)	**($59.6)**				
Net Present Value (20 Years)	**($106.9)**				

As shown in Figure 26, the projected cost of the City Option is greater than the projected cost of the Evergy Option in each year of the Forecast Period. Debt service is estimated to represent approximately 18 percent of the operating cost in the initial years of the feasibility study.

Figure 27 compares the estimated utility rates of the City Option and Evergy Option in the Base Case scenario, indicating that switching to a municipal electric utility would result in a net cost to the City.

Figure 27: Base Case Rate Comparison



7.3 HIGH COST AND LOW COST SCENARIO RESULTS

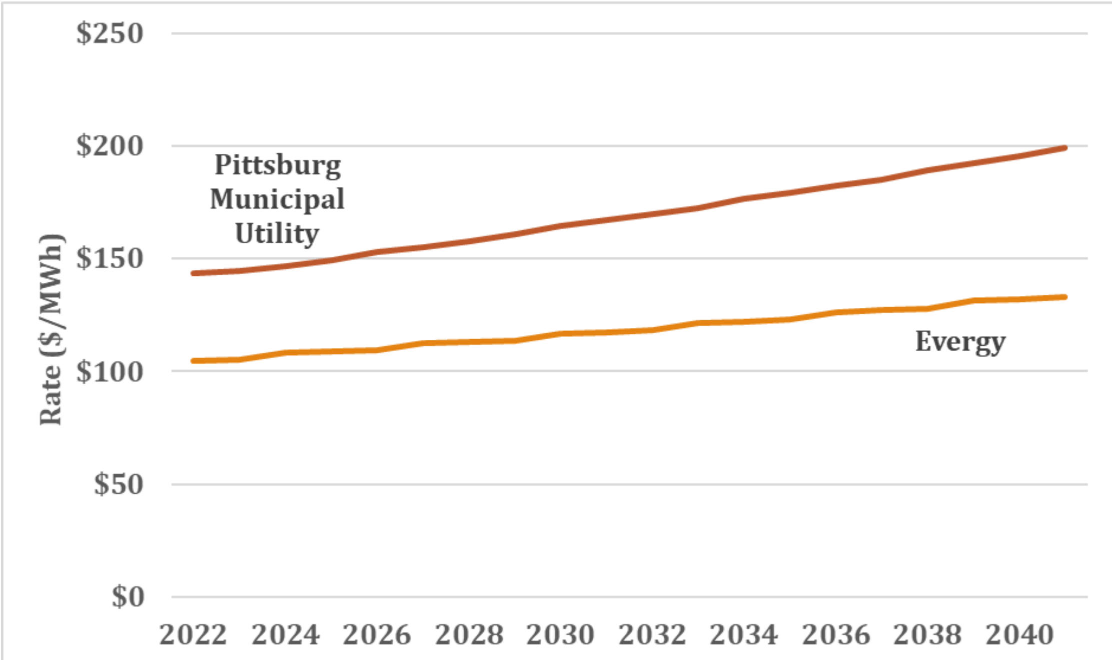
The High Cost Scenario indicates a net present value financial loss of $103.7 million over a 10-year period, and a net present value loss of $198.6 million over a 20-year period from municipal ownership and operation of the electric utility as compared with a continuation of service with Evergy.

Figure 28: High Cost Scenario: 2022 Transition

Revenue Requirement ($mm)	Year 1 (2022)	Year 5 (2026)	Year 10 (2031)	Year 15 (2036)	Year 20 (2041)
Evergy					
Estimated Rate Revenue	$30.6	$32.8	$36.3	$40.2	$43.7
City of Pittsburg Municipal Electric Cost of Service					
Debt Service (Principal & Interest)	$6.7	$7.0	$7.4	$7.7	$8.1
Energy-Related Expenses	$25.5	$28.1	$32.3	$36.9	$42.2
O&M Expenses	$7.9	$8.7	$9.8	$11.0	$12.3
Taxes and Fees	$1.8	$2.0	$2.2	$2.4	$2.7
Total Municipal Cost	**$41.9**	**$45.8**	**$51.6**	**$58.0**	**$65.4**
City Estimated Savings ($/Year)	*($11.4)*	*($13.0)*	*($15.3)*	*($17.8)*	*($21.6)*
Net Present Value (10 Years)	**($103.7)**				
Net Present Value (20 Years)	**($198.6)**				

The figure below compares the estimated utility rates of the City Option and Evergy Option in the High Cost scenario, indicating that switching to a municipal electric utility would result in net costs to the City.

Figure 29: High Cost Scenario Rate Comparison



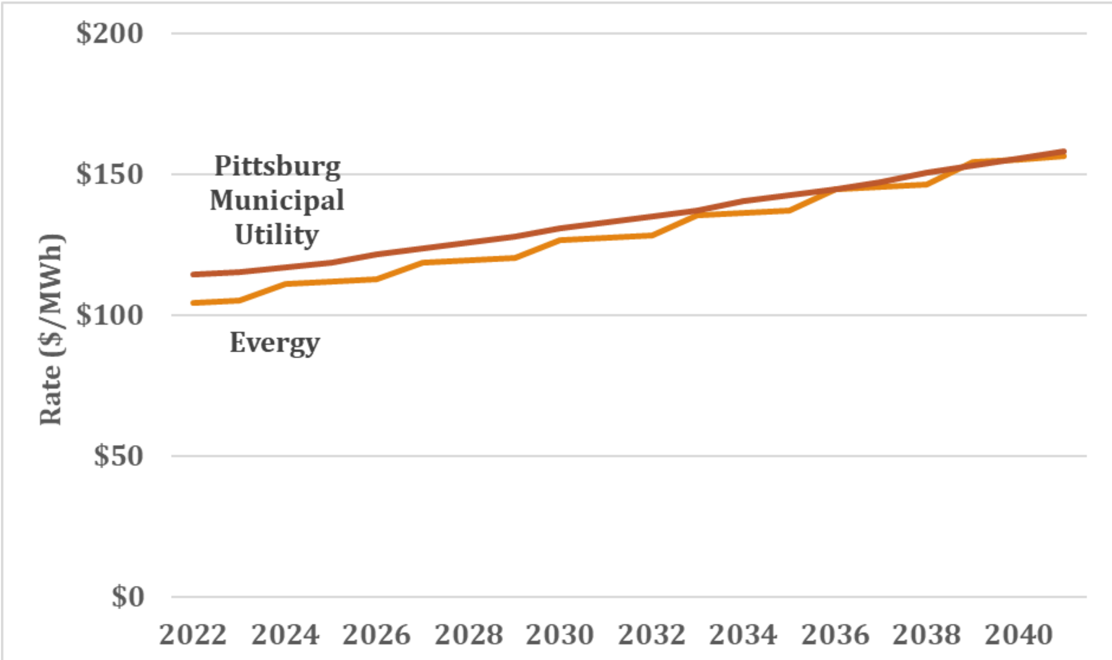
As shown in Figure 30, the Low Cost scenario indicates a net present value loss of approximately $17.2 million over a 10-year period associated with municipal ownership and operation of the electric utility, and a net present value loss of $21.4 million over a 20-year period.

Figure 30: Low Cost Scenario: 2022 Transition

Revenue Requirement ($mm)	Year 1 (2022)	Year 5 (2026)	Year 10 (2031)	Year 15 (2036)	Year 20 (2041)
Evergy					
Estimated Rate Revenue	$30.6	$33.7	$39.4	$46.1	$51.3
City of Pittsburg Municipal Electric Cost of Service					
Debt Service (Principal & Interest)	$6.4	$6.7	$7.1	$7.4	$7.8
Energy-Related Expenses	$21.4	$23.6	$27.1	$30.9	$35.4
O&M Expenses	$3.9	$4.2	$4.7	$5.3	$6.0
Taxes and Fees	$1.8	$2.0	$2.2	$2.4	$2.7
Total Municipal Cost	**$33.4**	**$36.5**	**$41.0**	**$46.1**	**$51.9**
City Estimated Savings ($/Year)	*($2.9)*	*($2.7)*	*($1.6)*	*($0.1)*	*($0.5)*
Net Present Value (10 Years)	**($17.2)**				
Net Present Value (20 Years)	**($21.4)**				

The figure below compares the estimated utility rates of the City Option and Evergy Option in the Low Cost scenario, indicating that switching to a municipal electric utility would result in net costs to the City.

Figure 31: Low Cost Scenario Rate Comparison

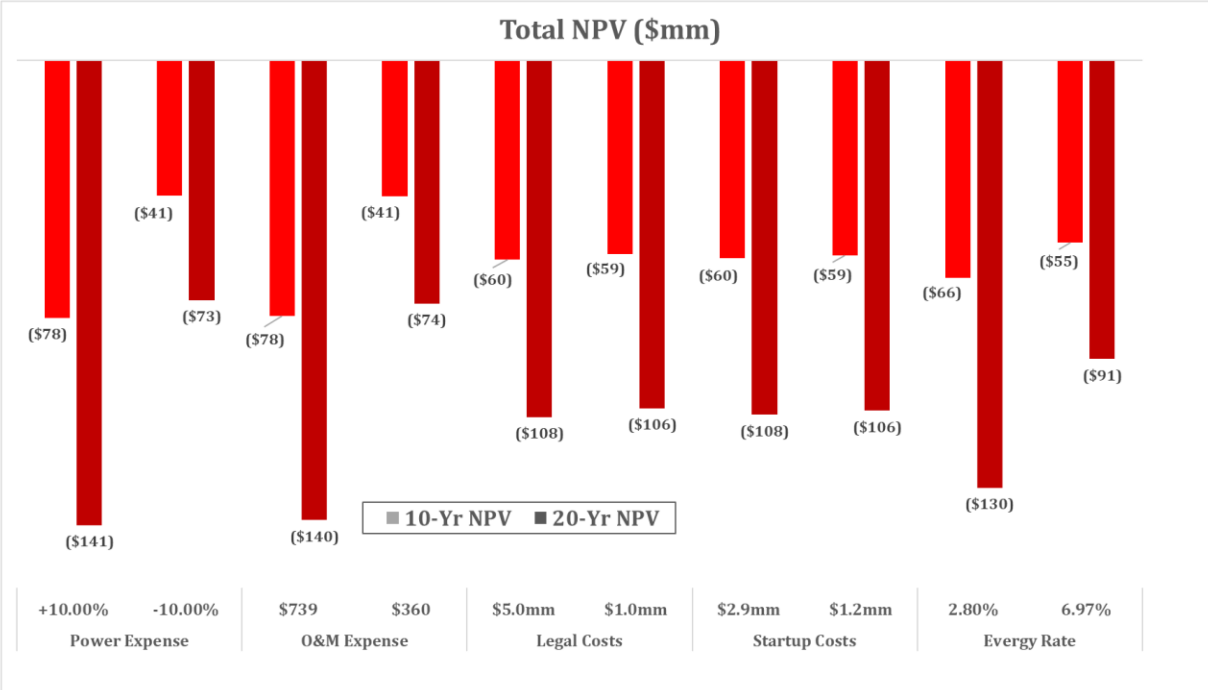


7.4 SENSITIVITY ANALYSES

As noted, sensitivity analyses are also conducted to assess the impact of individual changes in the Base Case assumptions. The sensitivity cases change individual assumptions that are also reflected on a combined basis in the High Cost and Low Cost scenarios described previously. For example, in the sensitivity analysis, the assumed power supply costs are varied +/- 10 percent from the Base Case, which is consistent with the variation in those costs reflected in the High Cost and Low Cost scenarios.

The first chart in Figure 32 shows the total NPV changes in each of the sensitivity cases, while the second chart shows the net changes from each sensitivity case from the Base Case results. As shown in Figure 32, even when changes in individual assumptions are made to the Base Case, the result remains that there is estimated to be a net cost to the City of municipalizing regardless of the change in assumptions. The most sensitive assumption in terms of varying the cost/benefit to the City of municipal ownership and operation is power supply expense. Decreasing the power supply expense by 10 percent from the Base Case would result in the net present value loss being less than in the Base Case (*i.e.*, $19 million less over 10 years and $34 million less over 20 years); however, municipal ownership and operation would still continue to be a net present value loss to the City. Specifically, as shown in Figure 32, a decrease in power supply cost by 10 percent from the Base Case would result in a net present value loss of $41 million over the first 10 years of ownership and a loss of $73 million over the 20-year Forecast Period.

Figure 32: Total NPV and Incremental NPV Changes from Base Case



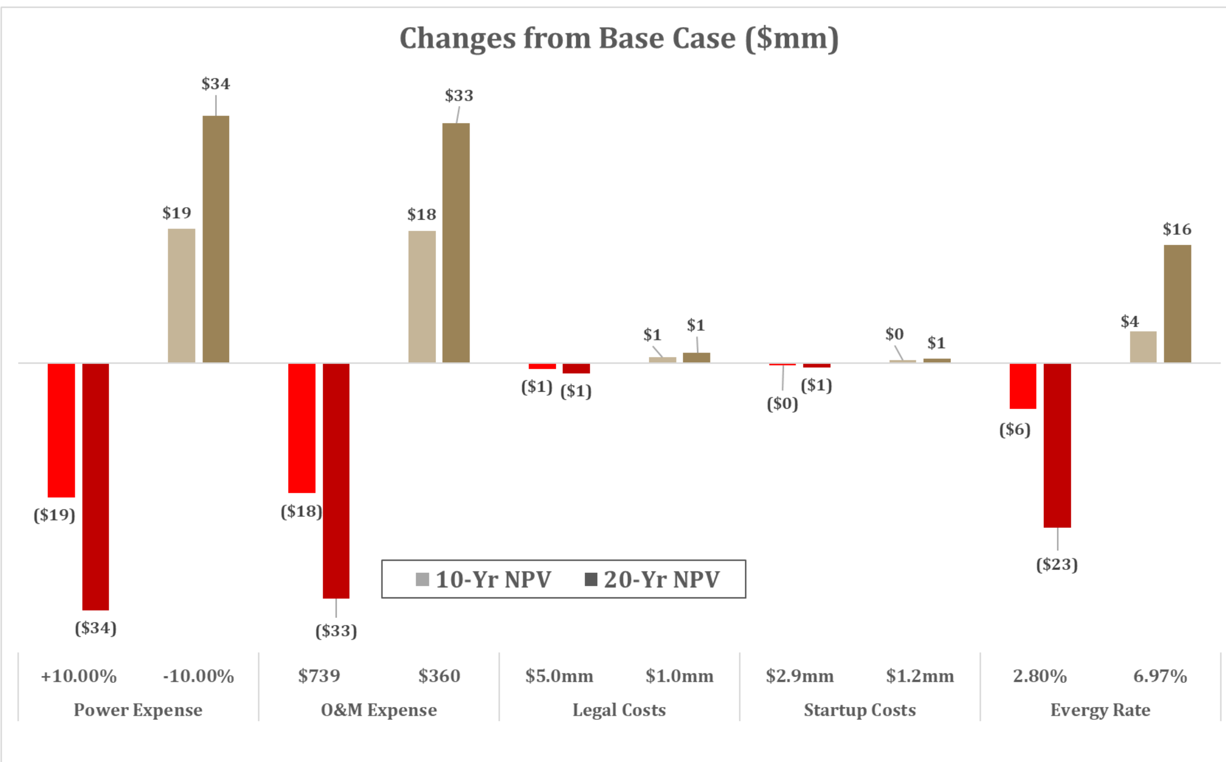


Figure 33 summarizes the total change in dollars for each sensitivity case relative to the Base Case.

Figure 33: Impact of Sensitivity Analyses Relative to the Base Case

City Estimated Savings ($mm)	Year 1 (2022)	Year 5 (2026)	Year 10 (2031)	10-Yr NPV	20-Yr NPV
Base Case	($7.1)	($7.8)	($8.2)	($59.6)	($106.9)
Sensitivity Cases					
Assumption 1: Power Supply Cost					
Increase 10.00%	($9.2)	($10.1)	($10.8)	($78.1)	($141.1)
Decrease 10.00%	($5.1)	($5.5)	($5.6)	($41.1)	($72.8)
Assumption 2: O&M Expense (Base Case: $551/customer)					
Increase to $739/customer (2022$)	($9.2)	($10.0)	($10.7)	($77.6)	($139.5)
Decrease to $360/customer (2022$)	($5.1)	($5.5)	($5.7)	($41.3)	($73.8)
Assumption 3: Legal Costs (Base Case: $3.0 million)					
Increase to $5.0 million (2022$)	($7.2)	($7.9)	($8.3)	($60.4)	($108.3)
Decrease to $1.0 million (2022$)	($7.0)	($7.7)	($8.1)	($58.8)	($105.5)
Assumption 4: Startup Costs (Base Case: $2.0 million)					
Increase $2.9 million (2022$)	($7.2)	($7.8)	($8.2)	($60.0)	($107.5)
Decrease $1.2 million (2022$)	($7.1)	($7.7)	($8.2)	($59.2)	($106.3)
Assumption 5: Evergy Rate Growth every 3 years (Base Case: 5.29%)					
Decrease to 2.80%	($7.1)	($8.3)	($10.0)	($66.0)	($129.7)
Increase to 6.97%	($7.1)	($7.4)	($6.9)	($55.2)	($90.6)

8 OTHER FACTORS TO BE CONSIDERED

There are a number of additional factors to be considered before initiating a municipal electric utility, including a number of uncertainties and other non-quantifiable issues. These include the ability to provide adequate regulatory oversight and supervision, potential impacts on reliability and the quality of service more generally, the ability to take advantage of technological advancements, and the ability to execute on clean energy and other societal goals. While Concentric has not specifically addressed these considerations in the Feasibility Study, these issues may affect the cost structure of a new municipal utility in the City and the service quality received by its customers and are therefore important factors to be considered prior to forming a new municipal electric utility.

Potential Issues to Consider

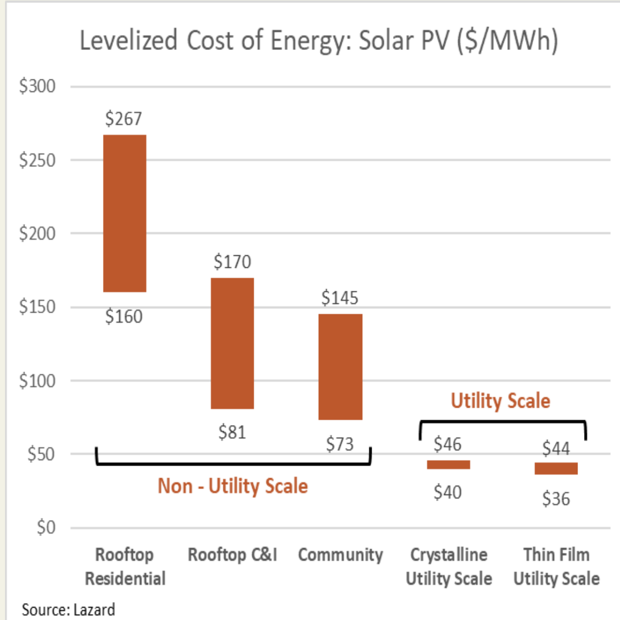
- Protracted nature of municipalization and associated cost escalation
- Ability to offer a range of rates comparable to utility offerings
- Impact of net metering and other offerings on rates and impacts to customers
- Value of Going Concern
- Power supply sources and issues
- Regulatory oversight and reliability

8.1 PROTRACTED NATURE OF MUNICIPALIZATION AND ASSOCIATED COST ESCALATION

As discussed, municipalization efforts can take many years, sometimes over a decade. The protracted nature of municipalization can drive up costs, both in terms of legal costs to move through the condemnation proceedings, as well as consulting and engineering costs to develop more detailed estimates of the acquisition-related costs. In the case of Pittsburg, more detailed engineering studies will be required regarding such issues as land, easements, and advanced metering infrastructure software, which could result in an additional $5 to $10 million, as well as more detailed evaluations regarding stranded distribution and generation assets. In addition, given the lengthy nature of the municipalization process, the electric market can change dramatically, including the costs of purchasing power.

Municipalization Drivers Case Study: Changing Landscapes

The City of Boulder's municipalization efforts started about a decade and a half ago and were primarily driven by a desire for increased renewable generation. Boulder has already spent $14 million as of January 2018 on this process. The lengthy legal process has allowed for significant changes in the landscape since the start of the effort, primarily regarding renewables. In December 2018, the incumbent utility, Xcel Energy, announced a goal of 100% zero-carbon electricity by 2050, and this goal was codified in Colorado legislation in June 2019. Additionally, multiple sources show that the cost of utility-scale renewables is far less than the cost for residential, community, or commercial scale renewable generation. Thus, significant costs have been borne by Boulder for a goal that is now being pursued by the existing utility at a more cost-effective scale.



8.2 SERVICES TO BE PROVIDED BY EVERGY AND PITTSBURG

An examination of Evergy's tariffs reveals the extent of services that are offered by Evergy. The City would need to determine whether to offer all of these services or a more limited set of services. Differences between the service options and the costs of providing each service should be considered when comparing the City Option to the Evergy Option.

Evergy currently offers 10 residential services, with KCPL offering five and Westar likewise offering 5. Evergy additionally provides 11 commercial and industrial services (with variations by size, type of customer, and commitment to serve), with Westar providing 4 and KCP&L providing 7. Evergy offers 11 area, street, highway, and signal lighting services (4 with Westar and 7 with KCP&L), and several ratemaking adjustments that are associated with services such as general supplementation service, cogeneration and small power production, low-income, energy conservation, and distributed energy production.

8.3 EFFECT OF NET ENERGY METERING ("NEM") AND OTHER OFFERINGS

If the City is to continue offering NEM rates such as done by Evergy currently, the City would need to measure and bill net energy produced by customer-sited solar according to a published tariff. This would require a determination as to how much compensation is provided to customers that produce more electricity than they consume during a billing period. Evergy compensates customers at the applicable retail rate for energy production that either reduces purchases from the utility or provides excess supply to Evergy. This net metering policy shifts the responsibility for recovering fixed costs of providing delivery service from the solar customer to all other customers, which is a controversial issue in many states.

The City would need to determine how it wants to compensate its solar customers and then implement an approach. To the extent that a higher proportion of customers take advantage of Evergy's NEM tariff than other parts of Evergy's service area, this would place upward pressure on electricity rates unless the City decides to reduce the level of compensation for solar customers. This is just one example of the need to carefully evaluate each and every service that is currently being provided by Evergy and determine whether—and on what terms—the service would be provided by the City.

In addition, the City would also incur additional expenses to offer low-income assistance programs and energy efficiency products and services, which would increase rates further.

8.4 GOING CONCERN VALUE

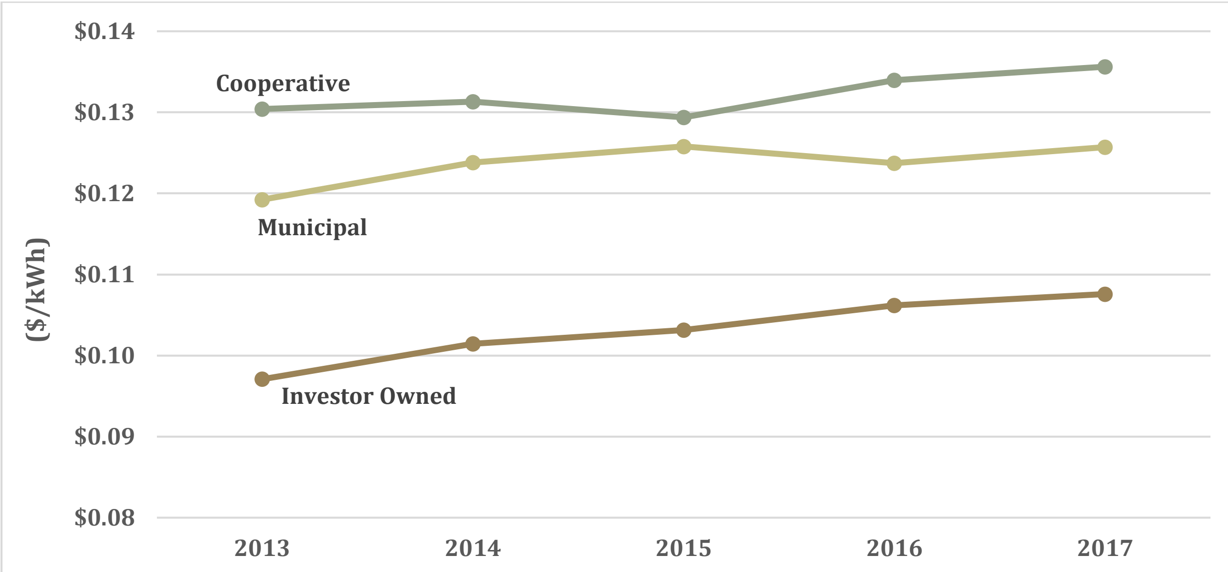
Going Concern value can be considered in the determination of just compensation assuming the City does not provide appropriate notice of termination of the franchise agreement. Going Concern represents the incremental value attributable to the fact that the distribution assets that are the subject of a condemnation are not just a collection of physical assets, but together comprise a business unit that is complete, functional, and can be run as a business unit on day one of the acquisition. This value is derived from all the elements that contribute to the complete operating business segment, including the establishment of a customer base, records, maps, and the time and cost of building the business.

Should inadequate notice of termination of the franchise agreement not be provided, the basis for calculating Going Concern value is defined in the Kansas statutes. For purposes of the Preliminary Feasibility Study, there is no value for Going Concern included in the comparison of the City Option and Evergy Option. While Concentric has not reflected a value for Going Concern in its analysis, if Going Concern were to be applicable if the City were to pursue municipalization, then such damages could be a significant incremental cost to the City that is not reflected in the financial calculations of municipal ownership and operation of the electric system herein.

8.5 POWER SUPPLY SOURCES AND ISSUES

Electric prices in Kansas are currently significantly lower for customers of investor-owned utilities as compared with those of cooperatives or municipals, as shown in the figure below.

Figure 34: Kansas Retail Electric Prices



Source: S&P Global Market Intelligence

Proponents of municipalization as the solution to rate reductions often cite large municipal utilities; however, many of these were established decades ago to electrify communities and also benefit from federally-funded hydropower or other power supply resources. For example, nearly all of the more than 900 cooperatives and 2,200 municipal electric systems were formed in the early 1900s, and rarely through an acquisition approach.

Specifically, the average establishment date for the largest 20 municipal utilities is 1934, or 85 years ago. This contrasts with the current market, where municipal utilities must acquire assets from investor-owned utilities and incur significant additional startup costs. In addition, several of the largest public power utilities also benefited from low cost, federally-funded hydropower. For example, of the largest 20 municipal utilities in the U.S., nine are located near the Bonneville Power Administration in the Pacific Northwest or the Tennessee Valley Authority in the Southeast.[58] Access to these federally-funded generation facilities provides these municipal utilities with power rates that are well below current market rates.[59] A municipal electric utility in Pittsburg will not have consistent access to low cost power sources such as from these federal resources.

[58] Includes Seattle City Light, Snohomish County PUD No. 1, PUD No. 1 of Cowlitz County, and Tacoma Public Utilities in the Pacific Northwest and Memphis Light, Gas and Water Division, Nashville Electric Service, the City of Chattanooga, the City of Knoxville, and Huntsville Utilities in the Southeast.

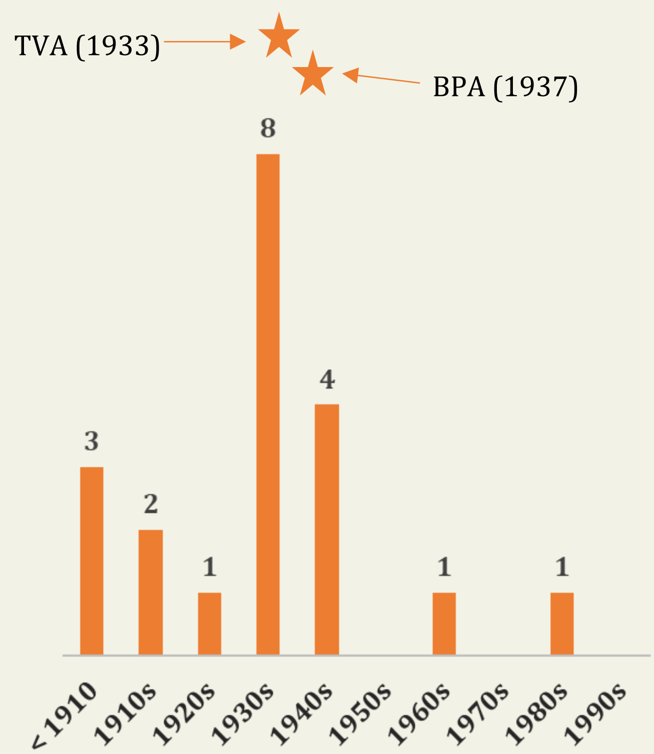
[59] While this report does not specifically address reliability, there is no evidence that Concentric is aware of that suggests that the reliability of public power authorities is stronger than the reliability provided by investor-owned utilities.

Figure 35: Largest Public Power Utilities

Largest 20 Public Power Utilities

- Salt River Project, AZ (1937)
- LADWP, CA (1916)
- CPS Energy, TX (1942)
- NYPA, NY (1931)
- LIPA, NY (1985)
- Memphis Light, TN (1939)
- Austin Energy, TX (1895)
- JEA, FL (1968)
- Nashville, TN (1939)
- Sacramento PUD, CA (1946)
- Omaha PPD, NE (1946)
- Seattle City Light, WA (1904)
- Santee Cooper, SC (1934)
- Snohomish PUD (1949)
- Orlando Utilities, FL (1923)
- City of Chattanooga, TN (1935)
- City of Knoxville, TN (1939)
- Huntsville Utilities, AL (1940)
- Cowlitz PUD, WA (1936)
- Tacoma, WA (1903)

Establishment Year of Largest 20



8.6 REGULATORY OVERSIGHT AND RELIABILITY CONCERNS

Evergy is regulated by the KCC, and this oversight takes several forms. First, oversight includes a review of every major investment decision by Evergy and approval of the terms under which new services can be offered, including the price. Second, the KCC oversees quality-of-service issues, including the resolution of customer complaints. The KCC reviews supply and distribution planning activities to ensure that they support the provision of safe, reliable and affordable service as well as other public policy objectives. These functions recognize that electricity is an essential public service that enables the well-being of citizens, the ability of local businesses to thrive and grow, and the achievement of environmental objectives. The KCC has considerable regulatory authority over

Evergy, subject to legal restrictions that require Evergy be allowed a reasonable opportunity to earn a fair return on invested capital. The KCC can prevent Evergy from earning both a return on and return of any investment that the KCC deems to have been imprudently incurred.

The public interest requires that the City establish some oversight mechanism to perform the functions that are currently provided by the KCC. This is achieved in various ways and may include a publicly elected “light board” that reviews all major decisions and approves any changes in the prices to be charged. While local authority has its advantages, it should be weighed against potential organizational and competency challenges of overseeing a relatively complex industry. In particular, overseeing quality of service requires the ability to assess the trade-off between desired improvements in the quality of service and both the implementing actions and costs of achieving such improvements. This may require periodic retention of outside engineering and financial expertise to perform these oversight functions.

The electric industry is currently undergoing a transformation that is being driven by a goal to interconnect solar energy and other distributed resources to the network. The industry is also making advances in information and communications technologies necessary to operate and maintain the distribution network through the increasing penetration rates of these resources. Many utilities are also implementing smart meters and associated systems in an effort to improve the efficiency of the network and provide opportunities to customers to save on their energy bills by changing usage patterns. There are substantial economies-of-scale associated with the information and other systems required to support distributed resources and smart meters. Large utilities are best equipped to plan, implement and operate these systems.

Grid Modernization

The U.S. Department of Energy established a Grid Modernization Initiative, with a large number of investor-owned utilities around the country focused on implementing grid modernization efforts.

Grid modernization efforts include:

- Improvements in **grid resiliency** and **reliability** in the face of growing climate change and other concerns.
- **Security**, including cybersecurity, to continually address new threats.
- **Flexibility** to create a more agile grid that can utilize a range of resources in meeting grid energy needs.
- **Affordability** to ensure customers benefit from technological gains but are not burdened with significant rate increases.
- **Sustainability** through integration of renewables into grid operations, including reliance on renewables to meet load needs.

Investor-owned utilities around the country are focused on implementing a range of initiatives to address grid modernization issues, including:

- New **software** to automate processes, monitor and control renewable resources to optimize use of renewables.
- Test and roll out new **technologies** for grid reliability, security, and flexibility.
- Integrate **renewables** into grid operations, including electric vehicles, battery storage, smart meters/smart inverters, and large-scale renewables.

Grid modernization efforts require significant funds and a long-term commitment to technological and process improvements that municipal utilities are not equipped to address.