

**REQUEST FOR PROPOSALS
FOR PUBLIC-PRIVATE PARTNERSHIP
DEVELOPMENT TEAM FOR IMPLEMENTATION OF
ENERGY DELIVERY SYSTEM FOR MUNICIPAL
ELECTRIC UTILITY**



Issued: January 31, 2025

Proposals Due: March 3, 2025

*All proposals limited to eligible pre-qualified proposers that participated in
Request for Qualifications, dated October 22, 2024*

1. Introduction – Coachella Municipal Electric Utility

On July 31, 2019, the City Council of the City of Coachella (“City”) adopted Resolution No. 2019-62 authorizing the creation of a limited municipally owned utility for the purpose of providing electrical utility services. The Coachella City Council established the municipal utility to provide electric and gas service to certain new development and under-served development (*i.e.*, “greenfield” areas) within the City’s municipal boundaries. The City has been exploring various options to ensure that its residents and businesses receive utility services that meet the current and future needs of the community at fair and reasonable rates. The City has also been exploring options to ensure that such services are cost-effective, meet federal and state standards, provide high-quality customer service, and provide long-term reliability to meet City energy needs.

On June 12, 2024, the Coachella City Council approved unanimously the issuance of a competitive solicitation process to start the new municipal electric utility.¹ On October 22, 2024, the City issued a *Request for Qualifications* (“RFQ”) to solicit interest and qualifications from prospective project partners to “jump start” the municipal electric utility. Proposals were due December 6, 2024. The City reviewed and scored the three proposals pursuant to the RFQ criteria, seeking to identify qualified prospective partners, and determined that all three prospective partners satisfied the RFQ requirements and are qualified to proceed to the formal solicitation phase.

The City is now launching its electric service program and issuing this *Request for Proposals* (“RFP”) to identify and select a project partner to develop, design, finance, construct, and/or operate an electric generation, distribution, and/or transmission system through a public-private partnership pursuant to California Government Code section 5956.5 *et seq.* that would serve immediate development needs and be scaled to serve increasing development within the City service area. In addition, the City has also examined the possibility of wheeling electricity and capacity over adjacent transmission lines owned and operated by the Imperial Irrigation District (“IID”). The City will, as part of this RFP, consider proposals from prospective counter-parties that would sell all or a portion of the necessary electricity and capacity to the City through wholesale power purchase agreements or energy services agreements (“ESA”), in conjunction with, or through some combination of a generation, distribution, transmission, and ESA energy delivery system (collectively, the “energy delivery system.”)

The City is seeking a provider or team who will provide the energy delivery system through a turnkey agreement with no upfront cost to the City but that City payments for the energy delivery system, including any use of an ESA, be structured through long-term payments to the provider secured by City electric revenues and a lockbox structure. Proposals under this RFP must include formal proposals and cost information.

¹ <https://meetings.municode.com/PublishPage/index?cid=COACHELACA&ppid=d85f3721-a990-46c3-8dbb-de13c6cad66c&p=0>.

2. Background and Project Description of Municipal Utility Formation

2.1. Coachella Development Area

The City of Coachella is located in the eastern Coachella Valley in Riverside County, California. The City is a California municipal corporation and general law city with a population of approximately 42,554 residents. It is one of the fastest growing cities in California and contains a number of large employers along with large-scale planned development in greenfield areas of the City.

Certain developed portions of the City, along with cities and unincorporated areas within eastern Coachella Valley, are currently being provided electric service by IID, an irrigation district formed under and governed by the California Water Code. As part of its powers as an irrigation district, IID provides electric service to ratepayers within its service territory of Imperial County. Due to historical factors, IID also provides electric service to certain areas outside of its territorial boundary, including eastern Riverside County where the City of Coachella is located.² Substantial load growth is anticipated in the City and throughout the region. For a variety of reasons, IID has faced significant challenges to its ability to extend timely, cost-effective service to new and existing customers in the City. Due to projected economic development and associated load growth and IID challenges in serving the City, the City seeks to ensure development of an energy delivery system that supports expected economic growth over the near term and beyond.

Due to the need for Coachella Valley governance and local control over electric service and aging and unavailable electrical infrastructure to serve existing and new development, among other reasons, the eastern Coachella Valley municipalities have been examining alternatives to their current electric service with IID.³ As part of those efforts, the City has determined that its residents and businesses are best served by a City owned and operated municipal utility due to the need for local control and self-governance, improved infrastructure to serve under-utilized and future development, and competitive rates and cost effectiveness while meeting state environmental goals. The municipal utility intends to serve new customers in undeveloped or under-served areas of the City in the form of a “spot utility,” and potentially some existing customers, which service will be in the largely undeveloped northeast portion of the City, as depicted on Attachment A of this RFP, attached hereto (the “Development Area”).

As part of the initial municipal utility service to the Development Area, the municipal utility will initially serve load in the M-W Wrecking Yard zone (also known as the “Auto Wrecking Zone”),

² IID also owns and operates certain transmission lines within eastern Riverside County and is the Balancing Authority for the area in which it provides retail electric service.

³ Prospective providers are encouraged to research the ongoing electric service issues in the Coachella Valley. See, e.g., Riverside County Local Area Formation Commission, *Alternative Governance & Electricity Services Study – Imperial Irrigation District*, available at: <https://lafco.org/studies/alternative-governance-structures-and-alternative-electricity-service-provision-imperial-irrigation-district>; see also Coachella Valley Energy Commission, available at <https://www.iid.com/government/coachella-valley-energy-commission>.

and in the Industrial Zone. The Auto Wrecking Zone encompasses approximately 260 acres, and is generally bound by the Union Pacific Railroad tracks and Dillon Road to the west, Avenue 48 to the north, the Whitewater River to the east, and Avenue 50 to the south. The Industrial Zone encompasses approximately 670 acres and is generally bound by Avenue 52 to the north, State Highway 111 to the west, Avenue 55 to the south, and a flood control channel to the east. The Auto Wrecking Zone and Industrial Zone are collectively known as and referred to herein as the “Economic Development Zone” or “EDZ,” and are depicted on Attachment B, attached hereto.

Developed portions of the City are currently served by IID, which provides electric service outside of its territorial boundary of Imperial County. IID acquired a public utility in the 1940s that provided certain service in the Coachella Valley. IID also purports to serve the Coachella Valley through a water rights Compromise Agreement executed in 1934, between IID, the Coachella Valley Water District, and the federal government. IID provides certain retail electric service outside its territorial boundaries, is a transmission provider subject to Open Access Transmission Tariff regulations and other rules of the Federal Energy Regulatory Commission (“FERC”), and is the Balancing Authority for the region. The City does not, at this time, propose providing its municipal utility service to existing City residents and businesses served by IID, except in limited fashion where feasible, but to the undeveloped and under-served areas of the City as depicted in the City’s service territory.⁴

2.2. Energy Delivery System and Municipal Utility Load Estimates

The City has conducted a feasibility analysis of the municipal utility. The City’s projected load estimates for the Development Area are set forth at Attachment C and the City’s *Feasibility Study for Municipal Electric Service to the Development Area*, dated April 2024, and accompanying *Staff Report* that were presented to the Coachella City Council on June 12, 2024 are set forth at Attachment D, both attached hereto. The total anticipated load in the EDZ is approximately 63 MW based on future industrial uses, with an additional 11 MW in the remaining Development Area. It is anticipated that City load in the EDZ may increase to approximately 40 to 50 MW over a short-term period of three to five years and will be a mix of commercial, industrial, and agricultural (including cannabis) loads, and that new distribution and transmission facilities, including one or more substations, will be required to serve load growth in the EDZ and throughout the larger Development Area. It is further anticipated that load growth will continue within the Development Area beyond the EDZ up to approximately 100 MW. In order to accommodate the load projections, the City is examining the electricity that will be needed from either an ESA or newly constructed generation, or both, as well as implementation of distribution and transmission facilities.

IID offers point-to-point transmission service for IID facilities. IID also sells available transmission capacity through its Open Access Transmission Tariff (“OATT”) to other entities that need IID lines to transport energy. This type of service can be used for the transportation of capacity and energy into, out of, through or within IID’s system. The City has explored upgrades

⁴ The Coachella City Council has authorized the issuance of a valuation study for IID assets serving the City that will be conducted through a separate Request for Proposals outside of this RFP process.

to existing IID facilities and wheeling over IID transmission. IID has publicly indicated that there is no available capacity on its existing transmission to serve new load in the Development Area. The City's feasibility study, however, found that there may be up to 40 MW of capacity available. Therefore, the City believes that some form of ESA as part of the energy delivery system may be necessary or possible in the short-term. Due to the uncertainty of available capacity on IID transmission, required capacity upgrades, and the ability to utilize IID's OATT to provide electricity and capacity to the City, prospective providers that desire to use an ESA as part of the energy delivery system should fully evaluate this issue.

In addition to the potential for an ESA as part of the energy delivery system, the City envisions the construction of generation, distribution and transmission facilities to be used and/or owned by the municipal utility. A proposed new substation on or around Harrison Street will be needed to serve load in the Auto Wrecking Zone (northern most EDZ), with an anticipated load of 30 MW. Any substation at this location would be used to serve future development of retail electric service outside the Auto Wrecking Zone. The substation would be configured for two 40 mega volt amp ("MVA") power transformers and twelve 12.5 kV feeders.

A second proposed new substation would also be located on or around Polk Street in the Industrial Zone of the EDZ serving approximately 30 MW of new commercial load and an additional retail load within the Development Area. The station would be configured for two 40 MVA power transformers and twelve 12.5 kV feeders.

It is assumed that the design of the two substations will meet an N-1 criterion (loss of any one system component and maintain electric service). The distribution feeders should also meet this N-1 criterion to the extent financially feasible.

To address challenges associated with forecasting load growth, any energy delivery system for the municipal utility must be easily scalable to timely meet demand growth in the Development Area. As the load requirements approach the limit of available transmission capacity from IID, or overall load reaches approximately 40 to 50 MW, the City anticipates obtaining a source at SCE's 230 kV line at or near the Coachella Valley Substation. The 20-year projected load for the City is 70 MW and the expected capacity of a 92 kV transmission line would be about 150 MW. Therefore, a 230/92 kV substation would be constructed and 92 kV lines extended to the two new substations (Harrison and Polk). The estimated distance of single pole 92 kV transmission is 7.2 miles. Approximately 3.5 miles would have a single 92 kV circuit with space for two distribution circuits on the structures. The other 3.7 miles would be double circuit 92 kV with space for two distribution circuits on the structures. A typical width for a 92 kV transmission line is 100 feet. Therefore, the loop would likely require acquisition of roughly a 50-foot strip easement. The other 50 feet will be located within the road right-of-way based on the proposed routing of the line. If at the time of construction, the load within the utility boundary is expected to exceed 150 MW, then 230 kV transmission would be warranted. CAISO approval will be required for any connection to SCE transmission.

The City further anticipates necessary distribution lines to be constructed within City limits as part of the energy delivery system in order to properly serve customer premises.

2.3. Coachella Development Projections

The current population of the City is approximately 42,554; however, with current planning efforts, the City is expected to grow three-fold by 2035.⁵

3. Municipal Utility Objectives

The objectives of the energy delivery system include, but are not limited to, the following, and should be addressed by the proposal:

- A. Development of local clean, reliable energy generation. This RFP does not require a specific technology. The City anticipates, however, that the construction of generation facilities could consist of a combination of natural gas, solar and battery energy storage up to approximately 49 MW. Generation must meet State of California renewable energy (“Renewables Portfolio Standard” or “RPS”) and resource adequacy capacity (“RA”) requirements.
- B. The City anticipates that development needs could also be met in the short-term through wheeling arrangements over IID’s transmission system in accordance with IID’s OATT and an ESA or full services agreement between the City and the proposer, or a proposal with some combination of generation, distribution, transmission and/or an ESA.
- C. Turnkey development and operation of local energy delivery infrastructure, including transmission and distribution facilities, substations, and control systems.
- D. The energy delivery system should be capable of expansion to serve anticipated load growth in the Development Area.
- E. The energy delivery system should be capable of interconnection to IID and SCE transmission systems, or have a long-term proposal to do so. If a standalone energy delivery system is proposed, consideration should be given to ancillary services.
- F. The energy delivery system should be capable of delivering products and services at a high level of reliability, supporting commercial and industrial operations.
- G. The generation component of the energy delivery system must comply with State of California RPS requirements, California and CAISO RA requirements, and regional air quality standards.
- H. The energy delivery system must comply with all other federal and state regulatory requirements that apply.

⁵ U.S. Bureau of the Census, Coachella, California, Estimate July 2022.
<https://www.census.gov/quickfacts/coachellacitycalifornia>.

- I. The energy delivery system should facilitate delivery of products and services to municipal utility customers at competitive retail rates with a tariff structure and predictable pricing forecasts.
- J. The energy delivery system should allow for a project participation structure, financing, and revenue model that insulates the City from financial and regulatory risk with no upfront cost to the City. The City does not intend to provide any financial or capital contribution to the energy delivery system project but may consider such proposals to the extent they are financially feasible (*e.g.*, bond issuance) and project risk remains with the developer.
- K. The energy delivery system should be able to deliver energy products and services sufficient to serve up to approximately 25 MW of load to the City in the next few years and be able to readily expand to timely serve additional load growth thereafter, up to approximately 50 MW.
- L. City municipal utility rates in the Development Area should be comparable to or less than rates charged by IID, along with a proposed system or model for City revenue sufficient to pay for energy delivery system and provide for low rates and stabilization.
- M. The City may assist with the acquisition of necessary land or rights-of-way for any generation, distribution or transmission infrastructure through the exercise of its powers of eminent domain, which would be recoverable in the proposer's financing.

4. Coachella Partnership Structure

The City desires that the energy services described in this RFP be accomplished through a public-private partnership that includes the City and one or more investment and development partners or that the partner provide electricity and capacity through an ESA with long-term implementation of generation, distribution and transmission based on the City's load in the Development Area.

- A. The City would leverage its role as a publicly owned utility and would own any facilities at the end of the term of an agreement (with buyout options).
- B. The City would otherwise control the municipal utility and energy delivery system.
- C. The partner(s) would take the risk of financing the energy delivery system, and where applicable, meeting all federal and state regulatory requirements.
- D. The partner(s) would provide the site for any facilities, where applicable.

Proposals will ultimately include the financing, design, construction, and operation of one or more generating facilities, a distribution and transmission system, and/or a combination of an ESA.

5. Content of RFP Proposals

Proposals should address the following points and be presented largely in the outline format provided below. A submission must include a complete and detailed proposal regarding the proposer's interest in the financing, design, construction, operation and maintenance of an energy delivery system.

5.1. Submission Outline

A. Executive Summary

1. Summarize the qualifications and interest in a narrative format.

B. City's Objectives

1. Demonstrate that the provider understands the City's objectives and the desired energy delivery system.

C. Development Team

1. Describe the development team and identify the consultants who would support the development team.
2. Describe the development team's interest in this project.
3. Provide an organization chart for the development team.
Provide resumes for each member of the proposed development team.

D. Experience

1. Describe the development team's qualifications and experience in designing, financing, constructing, and operating generation, distribution and transmission systems, and selling electricity and capacity.
2. Describe the development team's experience with working with publicly owned utilities and the formation and implementation of a municipal utility.
3. If the provider intends to sell electricity and/or capacity to the City through an ESA, describe the provider's experience as an energy supplier.
4. Describe up to three examples of specific projects the team, or members of the team, have completed, including project name and address. Describe the team's role in each project.

- a. Include any experience with local projects, projects in California, projects in the Western Electricity Coordinating Council region, or in other areas of the United States.
 - b. Include experience working with IID, SCE, CAISO and any applicable federal or state regulatory agencies.
 - c. Include experience working in partnership with local governments and publicly owned utilities.
 - d. Include experience in land use, regulatory, entitlement, and permitting processes, including water quality, air quality and other environmental experience and with California Environmental Quality Act (“CEQA”) review.
 - e. Include experience in the financing of generation, distribution or transmission projects.
5. Describe the proposed contract structure between the development team and the City, including, but not limited to, cost (e.g., fixed fee, \$/kWh, \$/customer, total cost), term, financing, construction and operation and maintenance.
 6. Describe the proposed collection and rate model the City would use to deliver services and collect rates sufficient to pay for the energy delivery system while maintaining customer rates comparable to or lower than IID.
 7. Describe the financial strength of the company or development team. The provider must be willing to provide financial statements or other evidence of financial capability upon request of the City as part of the evaluation process should the company or development team not be a large entity or be a publically traded company.
 8. Provide three references from related projects, including contact person and phone number, and brief project description.

6. Certification

A duly authorized officer or agent of the provider must sign the submission. Proposals that are unsigned will not be considered. In the case where multiple team members or firms desire to submit, a signature by a duly authorized officer or agent of each entity is required, though one entity should be designated the lead entity. The lead entity will ultimately be the contracting entity and will be responsible for subcontracting with its partners.

7. Compliance With Laws

The selected provider will be required to attest to *and* demonstrate that it can and will comply with the following federal and state requirements:

- 7.1. Government Claims Act. Pursuant to Government Code section 5956.8, the Project will be deemed to be public property for purposes of identification, maintenance, enforcement of laws and for purposes of the Government Claims Act (Gov. Code § 810 *et seq.*).
- 7.2. Labor Code. The Project will be constructed as and deemed to be “public works” as governed by the California Labor Code and will comply with the provisions thereof (Labor Code § 1720 *et seq.*).
- 7.3. Renewables Portfolio Standard. As a California municipal utility, the City will need to comply with State of California RPS requirements as governed and enforced by the California Energy Commission.
- 7.4. Resource Adequacy. As a California load serving entity, the City will be required with State of California Resource Adequacy Capacity requirements.
- 7.5. Balancing Authority Requirements. IID is the balancing authority in the eastern Coachella Valley and the City may be subject to certain regulations. In addition, energy purchased through an ESA by the proposer should also be familiar with CAISO requirements, where applicable.
- 7.6. Federal Energy Regulatory Commission. The transmission component of the energy delivery system will be subject to FERC or other balancing authority regulations.
- 7.7. California Environmental Quality Act. The City will be the lead agency under CEQA for the energy delivery system project. The provider, however, will be expected to prepare all required environmental documents for the City’s review and certification.
- 7.8. Resource Agencies. The provider will comply with all applicable federal and state resource agency requirements, including, but not limited to, South Coast Air Quality Management District, Colorado River Basin Regional Water Control Board, federal and state Fish & Wildlife, and U.S. Army Corps of Engineers.

8. **Conflict of Interest**

In accordance with Government Code section 5956.5, this RFQ/RFP process specifically prohibits practices that may result in unlawful activity, including, but not limited to, rebates, kickbacks, or other unlawful consideration as well as prohibits City officials and employees from participating in the selection process when those employees have a relationship with a person or business entity seeking a contract through the City’s solicitation process that would subject the City officials or employees to the prohibition of Government Code section 87100.

Any person or entity submitting interest and qualifications hereunder must attest, under penalty of perjury, that no official or employee of the City, nor any business entity in which an official of the City has an interest, has been employed or retained to solicit or aid in the procuring of any contract that may result from this RFQ/RFP process, nor that any such person will be employed in the performance of such a contract without immediate written disclosure of such fact to and consent by the City at its sole discretion.

In addition, proposals must disclose any existing financial or other interests that they may have in the Development Area. The failure to comply with this Conflict of Interest section is immediate grounds for the City's rejection of a proposal and termination of pre-qualifications or a future contract thereby.

9. Evaluation Criteria

All proposals will be screened by the City and its selection team based on the criteria in this Section 9, which criteria are listed in no particular order. The selection process will include an interview of one or more candidates, and the terms of any deal resulting from this process will be memorialized in writing in a legal instrument.

- A. Quality of response.
- B. Experience of project team.
- C. Familiarity with electric service issues in the City.
- D. References.
- E. Financial strength of provider.
- F. Costs to City.
- G. Customer rate model.

10. Submission

Proposals must be submitted to the City no later than **March 3, 2025, 5:00 p.m.** Pacific Prevailing Time. Proposals are limited to those firms that participated in the *Request for Qualifications*, dated October 22, 2024, and that has been pre-qualified and selected by the City to proceed to the RFP stage.

Proposals received after the deadline may not be considered in the sole discretion of the City. **One complete electronic version is required.** Faxed proposals will not be accepted. Proposers assume the risk of the methods of dispatch or delivery chosen.

Proposals must be electronically submitted through Best Best & Krieger LLP's Collaborate site for the "City of Coachella Electric Utility RFP" ("Collaborate Site"). For access to the Collaborate Site, please send an email to Richard.Martinez@bbklaw.com and Timothy.Lyons@bbklaw.com with (1) your name, (2) the firm you represent, and (3) a request for access to the Collaborate Site. You will thereafter receive an email invitation to register, if you have not already done so, and to join the Collaborate Site. You must upload your proposal to the Collaborate Site using the "Upload" feature and all electronic files must be submitted in

editable format to facilitate evaluation and planning. Word, Excel, GIS and PDF formats are acceptable.

11. Administrative Issues

11.1. Availability of the RFP and Amendments

This RFP is available on the City's website at <https://www.coachella.org/services/proposals-bids>. Any addendums or amendments supersede prior provisions and are effective upon posting, and each potential provider is responsible for checking these sources to learn of any amendments.

11.2. Questions about the RFP

All general correspondence and any questions about this RFP must be submitted to the Project Manager. The last date for questions will be on February 19, 2025 5:00 PPT. All questions will be considered to be public and released with an answer as expeditiously as possible. The identity of the person or company posing the question will not be disclosed. Providers should not contact the City Council or City staff about this RFP. Any attempts to contact the City regarding this RFP other than through the process described herein may be grounds for the City to reject a proposal.

12. Clarification of Proposals

Notwithstanding any other provision of this RFP, the City reserves the right to:

- A. Conduct discussions with any or all potential providers for the purpose of clarification of the RFP;
- B. Request supplemental information regarding any submission as part of the evaluation process;
- C. Waive, or decline to waive, any defect in any submission;
- D. Cancel or amend this RFP or issue other requests for qualifications or proposals; or
- E. Select no proposals at all.

13. Commencement of Work

Any proposals in response to this RFP, and the subsequent evaluation of that response by the City, does not constitute a contract or any type of agreement between the City and any provider for the commencement of work or the performance of any obligation. Only a written contract with the City will authorize the commencement of work or obligate the City on this Project.

14. Use of Subcontractors

Proposals may include use of sub-contractors or sub-consultants to fulfill any obligations in connection with the energy delivery system project. Use of sub-contractors or sub-consultants shall be subject to all applicable state and federal laws. A selected provider shall remain liable for fulfilling all its obligations on the energy delivery system project, and for any claims or damages arising from the sub-contractor's or sub-consultant's work.

15. Submission Costs

Providers that provide proposals in response to this RFP are responsible for all expenses incurred in preparing and submitting a proposal, or in contract negotiations with the City. Even if the City elects to reject all proposals, the City will not be liable for any costs or damages incurred by any provider in submitting hereunder or preparing and submitting a proposal or negotiating a contract.

16. Errors and Omissions in a Submission

A provider is responsible for all errors and omissions in its proposal. If it discovers an error and wishes to withdraw its proposal, the provider should notify the City immediately.

17. Errors and Omissions in the RFP

If the City becomes aware of an error or omission in the RFP, it will post a notice on the project website. If it discovers an error or omission after proposals are submitted, it may in its discretion proceed or reissue the RFP. Even if it elects to re-issue the RFP, the City will not be liable for any costs or damages incurred by any entity in preparing and submitting the original statement of interest and qualifications.

18. No Waiver of RFP Provisions

The City may, but is under no obligation to, waive any provision in this RFP at the request of a potential provider. Any such waiver shall apply to all potential providers, and no waiver shall constitute a waiver of any provision not specifically referenced therein.

19. Ownership and Confidentiality of Proposals

The City will not pay for any information requested herein, and all proposals become the property of the City. Proposals will not be returned and may be subject to disclosure pursuant to the California Public Records Act. The City may receive information that may be confidential as part of your proposal. If you believe that any portion of your submission includes proprietary or other confidential information, please clearly mark it as such and state the basis for your claim to confidential treatment. Unless otherwise required by law, the City will treat the information as confidential and will not disclose it to a third party without your permission. Information that is an integral part of the submission will likely not be considered confidential after an award of contract has been made.

20. Additional Information

Please see the following attachments for additional information.

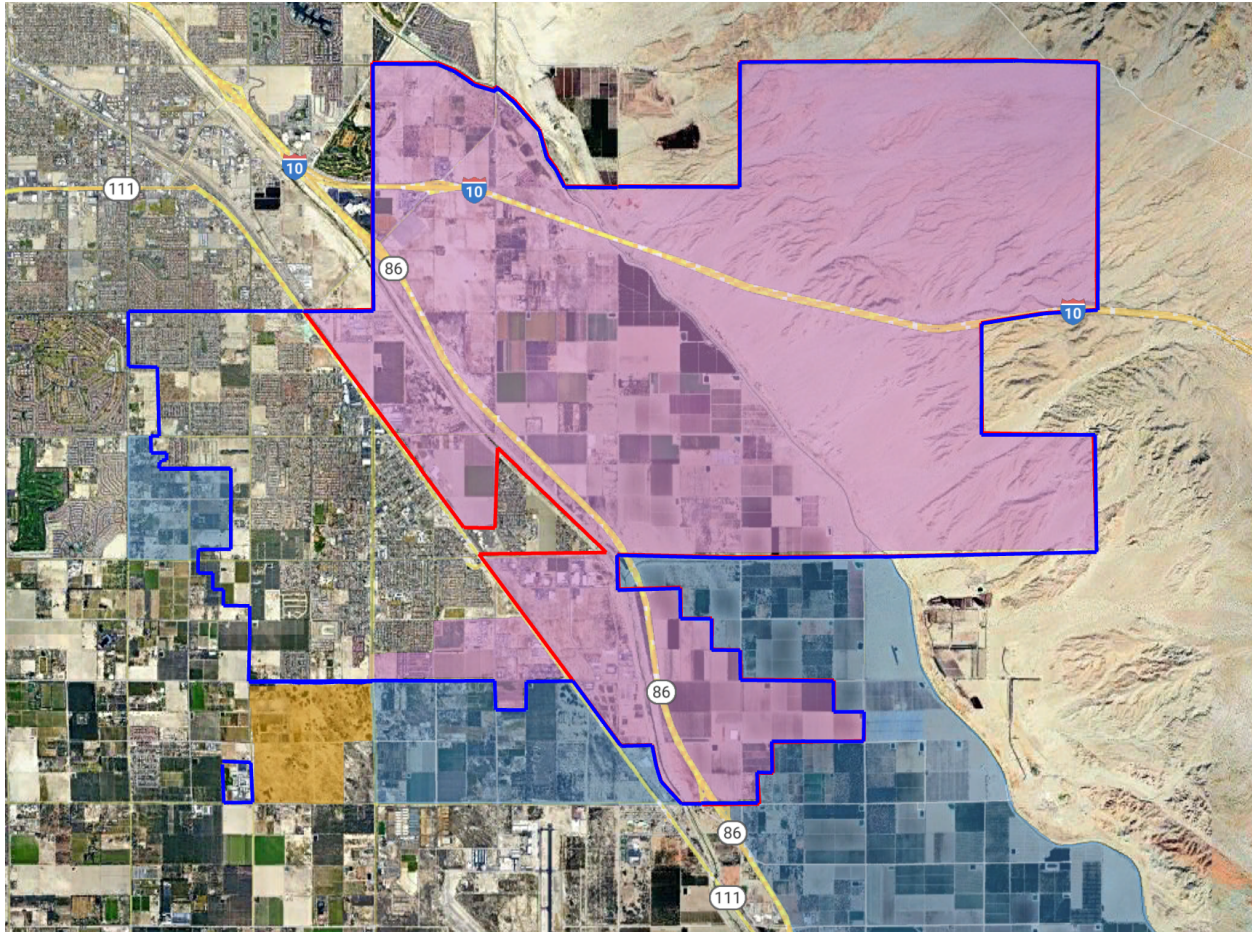
Attachment A: *Development Area*

Attachment B: *Economic Development Zone*

Attachment C: *City Load Estimates*

Attachment D: *Feasibility Study for Municipal Electric Service to the Development Area*

ATTACHMENT A
DEVELOPMENT AREA



LEGEND

- City Limits
- Development Area
- Augustine Reservation
- Sphere of Influence

ATTACHMENT B
ECONOMIC DEVELOPMENT ZONE (EDZ)





ATTACHMENT C
CITY LOAD ESTIMATES

(Chart Depicted on the Following Page)

Load Estimates	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Base										
Residential	2,500,000	3,200,000	4,100,000	5,300,000	6,800,000	8,600,000	11,100,000	14,200,000	18,100,000	23,200,000
General Service	2,000,000	2,500,000	3,100,000	3,900,000	4,900,000	6,100,000	7,600,000	8,400,000	9,200,000	10,200,000
Large General Service	9,000,000	9,700,000	10,500,000	11,300,000	12,200,000	13,200,000	14,300,000	15,400,000	16,700,000	18,000,000
Industrial	0	37,300,000	131,500,000	170,600,000	170,600,000	170,600,000	290,000,000	290,000,000	290,000,000	290,000,000
		0	0	0	0	0	0	0	0	0
Total Retail Sales, kWh	13,500,000	52,700,000	149,200,000	191,100,000	194,500,000	198,500,000	323,000,000	328,000,000	334,000,000	341,400,000
	0	0	0	0	0	0	0	0	0	0
System Requirements, MWh	13,905	54,281	153,676	196,833	200,335	204,455	332,690	337,840	344,020	351,642
System Peak Demand, MW	2	10	27	35	35	36	58	59	60	62
Low										
Residential	1,300,000	1,400,000	1,500,000	1,700,000	1,800,000	2,000,000	2,200,000	2,400,000	2,700,000	2,900,000
General Service	1,000,000	1,000,000	1,000,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,200,000	1,200,000
Large General Service	4,500,000	4,600,000	4,700,000	4,800,000	4,900,000	5,000,000	5,100,000	5,200,000	5,300,000	5,400,000
Industrial	0	18,700,000	65,800,000	85,300,000	85,300,000	85,300,000	145,000,000	145,000,000	145,000,000	145,000,000
		0	0	0	0	0	0	0	0	0
Total Retail Sales, kWh	6,800,000	25,700,000	73,000,000	92,900,000	93,100,000	93,400,000	153,400,000	153,700,000	154,200,000	154,500,000
		0	0	0	0	0	0	0	0	0
System Requirements, MWh	7,004	26,471	75,190	95,687	95,893	96,202	158,002	158,311	158,826	159,135
System Peak Demand, MW	1	5	13	17	17	17	28	28	28	28
High										
Residential	2,500,000	3,200,000	4,100,000	5,300,000	6,800,000	8,600,000	11,100,000	14,200,000	18,100,000	23,200,000
General Service	2,000,000	16,900,000	18,500,000	20,400,000	22,400,000	24,700,000	27,200,000	29,900,000	32,900,000	36,100,000
		0	0	0	0	0	0	0	0	0
Large General Service	9,700,000	9,700,000	9,700,000	9,700,000	9,700,000	9,700,000	9,700,000	9,700,000	9,700,000	9,700,000
Industrial	0	37,300,000	131,500,000	170,600,000	170,600,000	170,600,000	290,000,000	327,100,000	335,400,000	339,600,000
		0	0	0	0	0	0	0	0	0
Total Retail Sales, kWh	14,200,000	67,100,000	163,800,000	206,000,000	209,500,000	213,600,000	338,000,000	380,900,000	396,100,000	408,600,000
	0	0	0	0	0	0	0	0	0	0
System Requirements, MWh	14,626	69,113	168,714	212,180	215,785	220,008	348,140	392,327	407,983	420,858
System Peak Demand, MW	3	12	30	37	38	39	61	69	72	74

ATTACHMENT D

**FEASIBILITY STUDY FOR MUNICIPAL ELECTRIC SERVICE
TO THE DEVELOPMENT AREA**

(Study follows on next page)



STAFF REPORT
6/12/2024

TO: Honorable Mayor and City Council Members

FROM: Dr. Gabriel Martin, City Manager

Ryan Baron, City Attorney's Office, Best Best & Krieger, LLP

SUBJECT: Feasibility Study for Municipal Electric Service to the City's Development Area / Request for Proposals for a Public-Private Partnership for Implementation of the City's Municipal Electric Utility

STAFF RECOMMENDATION:

1. Receive and file feasibility study for municipal electric service to the City's development area.
2. Staff recommends that the City Council approve the issuance of a Request for Information and a Request for Proposals for a public-private partnership for implementation of the City's municipal electric utility within the City development area, including the Economic Development Zone.
3. Staff recommends that the City Council approve the issuance of a Request for Proposals for a valuation study of Imperial Irrigation District assets providing electric service to the developed portion of the City.

BACKGROUND:

The Coachella Valley is one of the fastest growing areas in California. The City of Coachella is projected to grow rapidly containing a number of large employers along with large-scale master planned development in greenfield areas of the City. The eastern portion of the Coachella Valley, including the City, is currently receiving electric service from the Imperial Irrigation District, which provides this service outside its territorial boundary of Imperial County. There remains significant areas of the Coachella Valley, and the City, however, that are not served, or cannot be served, by IID due a lack of electric infrastructure or a need to significantly upgrade the existing infrastructure in the area, such as the construction of new substations. The eastern Coachella Valley is growing rapidly but development has been hindered by the inability to provide electricity to this development, thereby impacting growth, employment, and fiscal revenue. Due to the lack of infrastructure throughout the City and that the City does not have any representation or governance options in IID electric service matters, the City has been interested in local control of its electricity service and providing such service to the City's undeveloped and under-served areas.

On July 31, 2019, the City Council adopted Resolution 2019-62 authorizing the creation of a limited municipally owned utility for the purpose of providing electrical utility services and authorized the taking of other actions. The Coachella City Council established the municipal utility to provide electric and gas service to certain new development and under-served development (*i.e.*, “greenfield” areas) within the City’s municipal boundaries. At that time, a service area for a municipal utility was established and the City Manager was authorized to take all necessary steps to create and establish the municipal utility and evaluate the areas and manner for providing utility service as a publicly owned utility. Since then, the City has been exploring various options to ensure that its residents and businesses receive utility services that meet the current and future needs of the community at fair and reasonable rates. The City has also been exploring options to ensure that such services are cost-effective, meet federal and state standards, provide high-quality customer service, and provide long-term reliability to meet City energy needs. The City has also participated in regional efforts to address the lack of service and governance, including its participation on the Coachella Valley Energy Commission, an advisory body to IID.

Since the adoption of Resolution No. 2019-62, City staff has researched the legal options of implementing the municipal utility and has conducted a feasibility study to assess the financial and technical issues of establishing an electric delivery system to greenfield areas of the City also referred to as the Development Area. This Development Area includes the Economic Development Zone, which consists of the Auto-Wrecking Zone and Industrial Zone, where initial load is projected to increase rapidly due to prospective and cannabis and industrial interests. The feasibility study was prepared by EES Consulting who has prepared numerous municipalization feasibility studies throughout the nation, including a study in the 2000s for the Coachella Valley Association of Governments. The study concludes that service to the economic development zone and the greenfield areas of the City is feasible and beneficial to City electric customers when growth occurs in those areas. The study uses certain data and forecasts the City’s 20-year energy needs. It also projects revenue and rate requirements and outlines where the construction of new electrical infrastructure is required, including the construction of two new substations and transmission, as well as potential wheeling of energy over IID’s existing transmission in order to serve initial municipal utility load.

DISCUSSION/ANALYSIS:

The study makes the following observations:

Considerations	
Access to IID Capacity	Initial plan is to use capacity from IID’s 92kV transmission. If access is denied, accelerate SCE interconnection.
Load Growth Risk	Break-even threshold is 55,000 MWh with annual 5% IID rate increases.
Change in Load Mix	Cannabis is High Density Energy Needs 100-200 kWh/sq.ft. Traditional Industrial/Commercial 8-50 kWh/sq.ft. Even with

	reductions in high density load, the City could likely achieve breakeven sales threshold of 55,000 MWh.
New Municipal Utility	IID can challenge new utility. Limiting to greenspace-only rather than acquisition of IID customers does not eliminate the uncertainty.
Initial Financing	\$67.3 M
RPS Requirements	Purchase from interconnection with IID or SCE.
Customer Funded Distribution Lines	Customers will need to contribute 100% for distribution facilities to serve new load.
Reliability	Transmission feed radial is a weak point.
Resource Adequacy	City must rely on bilateral transactions for RA subject to price risk.

The study provides the following options as Phase 2 steps the City can take with respect to implementing a municipal utility:

1. Consider moving forward with a request for proposals for power supply and/or a turnkey developer to implement the municipal utility in the Development Area.
2. Explore valuation and acquisition of IID assets that currently serve the City.

City staff recommends that the City move forward with issuing requests for proposals based on the two options. In order to begin providing service to the Development Area of the City, the City would need to consider constructing certain electric delivery system facilities and generation facilities and/or purchasing electricity through an energy services agreement and wheeling the energy over IID transmission system. Due to the bond issuance that would be needed to finance the facilities, City staff contemplates issuing a request for information for a developer to construct and own the facilities through a public-private partnership agreement that would jump-start the municipal utility. The request for information would be sent potential energy developers and suppliers nationwide requesting a statement of interest and qualifications from companies on the proposed P3 project. Eligible companies would then be pre-qualified by the City and would receive a request for proposals detailing the specific proposal and cost information. A slate of candidates would then be brought back from City Council review and direction to negotiate a contract.

City staff also recommends, in parallel, that the city conduct a valuation of IID's infrastructure serving the city as a necessary step in acquiring IID electrical infrastructure to take over service to existing customers over the long-term. City staff would issue a request for proposals for a consultant to conduct the valuation study.

ENVIRONMENTAL ASSESSMENT:

The recommended actions are exempt from the California Environmental Quality Act. The issuance of a RFP does not constitute a project within the meaning of the CEQA Guidelines, Section 15061(b)(3), as it does not result in any direct or indirect physical change in the environment.

ALTERNATIVE(s):

1. Not approve RFP for P3 partnership and provide Staff with new direction

FISCAL IMPACT:

There is no fiscal impact for this item.

EXHIBIT(S):

- A. Feasibility Study for Municipal Electric Service to the Development Area

PREPARED BY EES CONSULTING

City of Coachella

Feasibility Study for Municipal Electric Service to the Development Area

April 2024



April 18, 2024

Mr. Gabriel Martin
City of Coachella
1515 Sixth Street
Coachella, CA 92236

RE: City of Coachella Feasibility Study for Municipal Electric Service to the Development Area

Dear Mr. Martin:

We are pleased to submit to the City of Coachella (City) the Feasibility Study for Municipal Electric Service to the Development Area (Study). The Study used publicly available information to develop load power cost estimates.

The Study, which focuses on service to the economic development zones and select greenfield development. The Study finds that municipalization is beneficial to the City's electric customers when significant growth occurs in the new development area.

Thank you for your contributions to this Study.

Sincerely,

Kevin J. Mara
Executive Vice President

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1 Scope of Work

1.1 INTRODUCTION

The City of Coachella (City) seeks to ensure that its residents and businesses receive utility services that meet their current needs and provide for electric utility supply for the future needs of the community at fair and reasonable rates. Thus, in 2019, the City established a municipal utility to provide electric service within the City, with an initial focus on new development areas (City Resolution No. 2019-62.) The City is currently considering options for providing electric service to future customers locating in primarily undeveloped areas of the City's Development Area (i.e., "greenfield" areas).

The current population of the City is approximately 42,600; however, with current planning efforts, the City expects the population to grow three-fold by 2035.¹ Currently, citizens of the City, and businesses within the City, are provided electrical service by Imperial Irrigation District (IID), a publicly-owned utility.

1.1.1 About Imperial Irrigation District (IID)

Imperial Irrigation District (IID) is the sixth largest utility in California public utility providing electric and water service to areas across both the Imperial and Coachella Valleys including Riverside and San Diego Counties. The utility employs approximately 1,400 people, serves over 158,000 electric customers and controls more than 1,100 MW of energy. IID's total service area covers 6,471 square miles. IID is governed by a 5-member board of directors. IID's resource mix is approximately 40% renewable, 35% natural gas, 4.8% hydroelectric, 3.5% nuclear, and 16% unspecified (market purchases).² IID owns and operates several generating resources such as several small hydroelectric facilities on the All-American Canal and the Pilot Knob plant. IID is a member of the Southern California Public Power Authority (SCPPA). SCPPA members share several resources including the Palo Verde Station (nuclear), Parker-David Dam, Boulder Canyon, Yucca Steam Plant, 13 natural gas resources, and a battery storage system near El Centro.

IID residential retail electric rates include a fixed monthly charge, energy charge, plus an energy cost adjustment (ECA). The ECA is updated regularly to reflect changes in IID's wholesale power costs. IID's large power rates also include demand charges in addition to fixed customer charges and energy charges. Finally, IID customers can elect to purchase up to 100% renewable energy from IID through an Energy Cost Adjustment Renewable Billing Factor (Green Power Program).

Not only is IID a retail service provider, but it is also an energy Balancing Authority (BA). As a BA, IID ensures that the power system and demand are balanced in real time throughout the balancing area which includes Coachella Valley. IID is also responsible for maintaining operating conditions under the

¹ U.S. Bureau of the Census. Coachella, California. Estimate July 2022.
<https://www.census.gov/quickfacts/coachellacitycalifornia>

² Imperial Irrigation District 2021 Power Content Label. <https://www.iid.com/energy/renewable-energy/power-content-label>

reliability standards issued by the North American Electric Reliability Corporation (NERC) and approved by the U.S. Federal Energy Regulatory Commission (FERC).

1.1.2 Study Framework

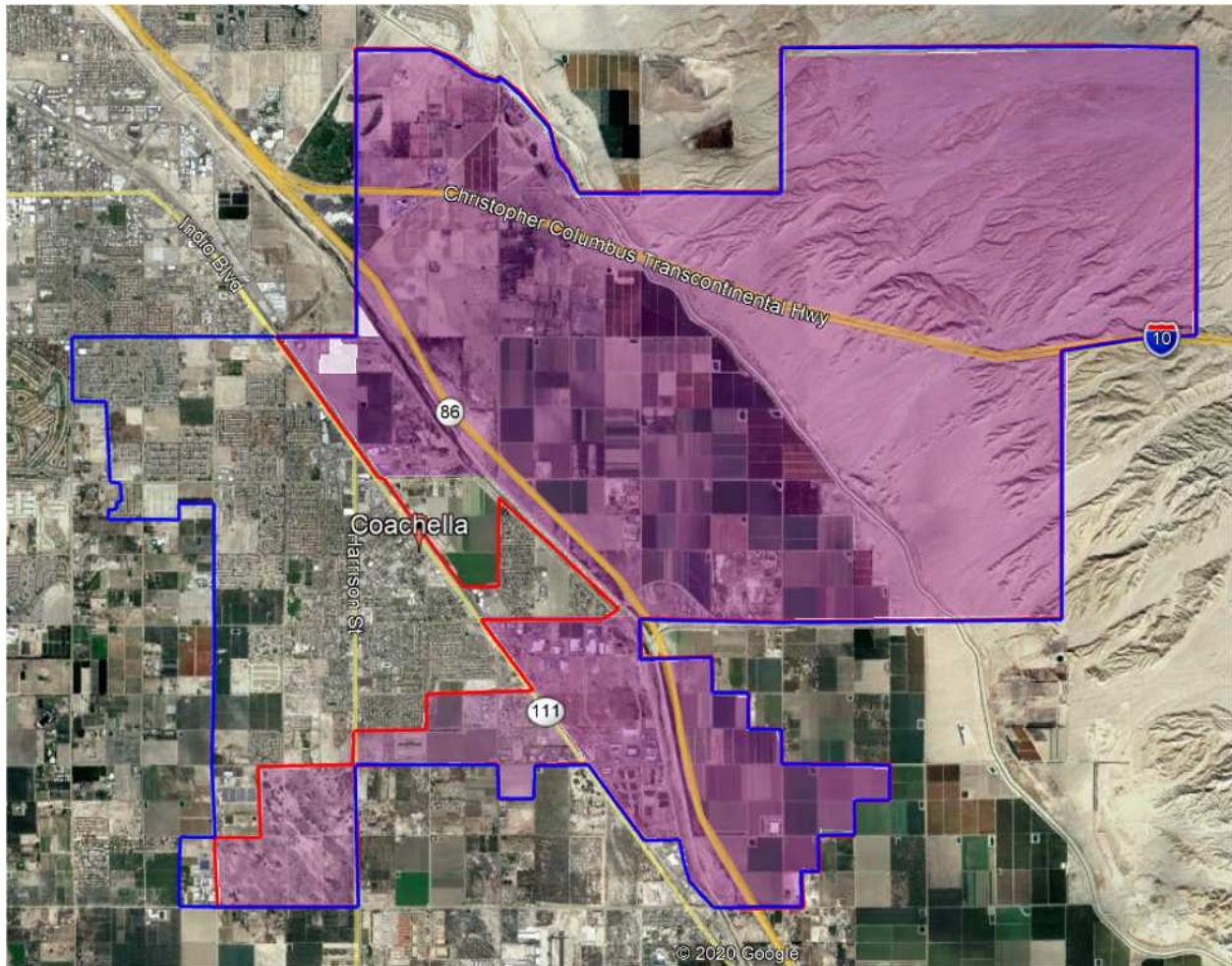
The City asked EES Consulting (EES), a GDS Associates Company, to evaluate the feasibility of the City serving new electric customers located within a portion of the City's boundaries through the municipal utility. This Feasibility Study for Municipal Electric Utility Service to the Development Area (Study) considers the investment needed to serve new customers and the potential supply costs. This Study does not include acquisition of existing assets owned by IID and used to serve existing IID customers.

The Study considers the case where the City develops the necessary energy delivery infrastructure and procures energy from the market. In order to estimate feasibility of energizing the City's utility, costs are forecasted over a 20-year study period beginning in 2025. Revenues for the potential municipal utility are calculated to be competitive with the current and forecast IID retail rates. Other operating costs are estimated from comparable electric utilities.

1.2 PROPOSED SERVICE AREA

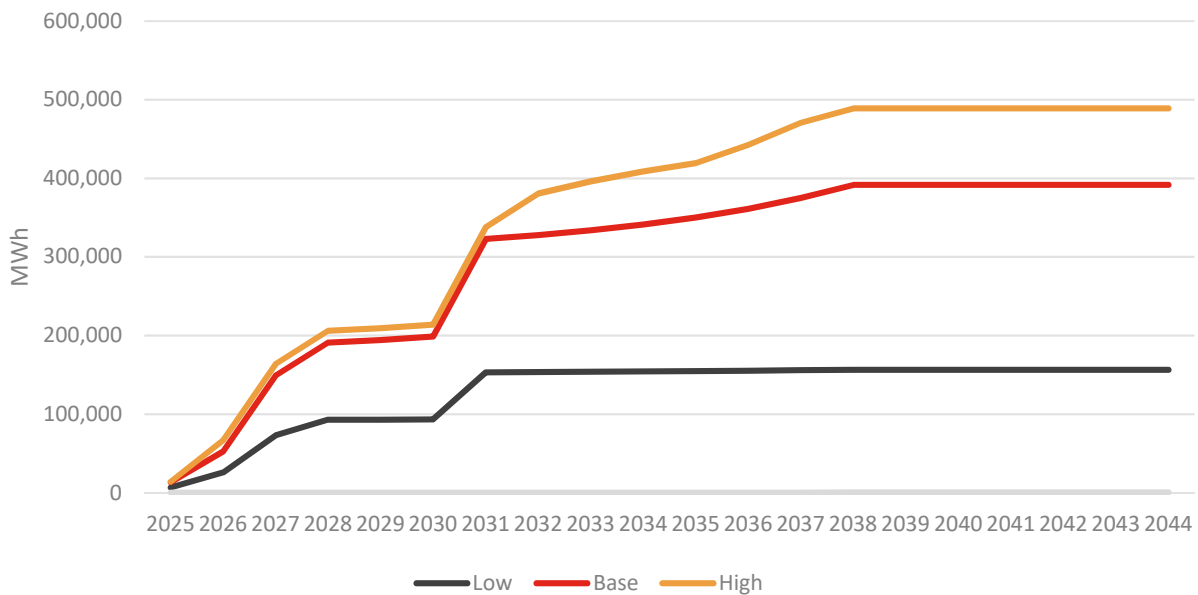
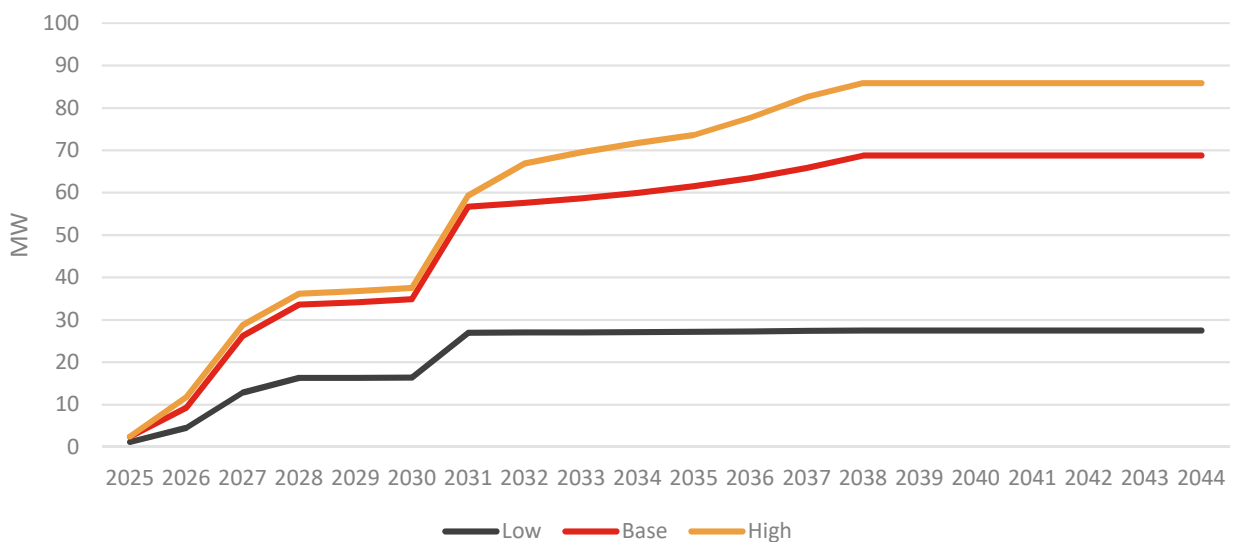
Figure 1.1 illustrates the current municipal boundary in blue. The proposed initial municipal electric utility boundary is provided in red and shaded purple. The areas outside of the purple shading would continue to be served by IID. The Development Areas are located with the purple shading.

FIGURE 1.1: CITY MUNICIPAL UTILITY SERVICE AREA



1.3 20-YEAR ENERGY NEEDS

The Study developed a forecast of energy needs for the next 20 years for the municipal utility service area. Much of the growth is expected in the Economic Development Zones (EDZ) which are in the boundaries of the City's municipal utility. One is known as the Auto Wrecker Zone (northern most EDZ), and the second is the Industrial Zone (between Avenue 52 and Avenue 54). Figure 1.2 depicts the growth of annual energy sales and Figure 1.3 shows the forecasted electrical demand. EES added the ramp-up of energy sales between 2025 and 2030 to reflect potential near-term growth in the EDZs.

FIGURE 1.2: 20-YEAR LOAD FORECAST COMPARISON**FIGURE 1.3: 20-YEAR PEAK DEMAND FORECASTS**

1.4 FINANCIAL FEASIBILITY ASSUMPTIONS AND RESULTS

An annual budget was developed for the City's municipal utility based on the load assumptions, take-out financing, and estimated future capital improvement investments. Power supply costs assume the utility would meet all California mandates for renewable energy and resource adequacy or otherwise obtain waivers from some or all of those requirements. It is assumed that City finances the necessary infrastructure and pursues competitive offers for energy by means of wheeling through IID's transmission system.

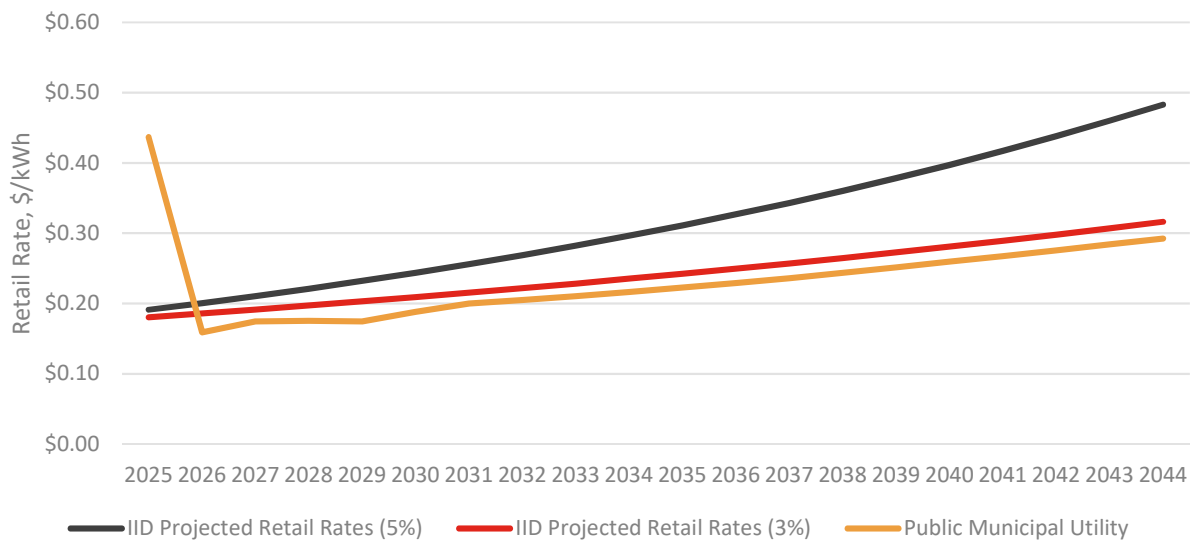
Table 1.1 summarizes the revenue requirement for the third year of operations. The load forecast for the third year has a demand component of 37.5 MW and projected energy sales of 191,158 MWh. The difference in financing is reflected in the debt service in Table 1.1 which is a snapshot of the revenue requirements needed in Year 3.

TABLE 1.1: YEAR 3 REVENUE REQUIREMENT, MILLIONS

	Municipal Utility Revenue Requirement
Power Supply & Transmission	\$14.64
Distribution O&M	\$1.47
Customer Service	\$0.25
A&G	\$0.32
Capital Improvement	\$0.56
Debt Service	\$1.89
Franchise Fee	\$1.59
Taxes	\$0.11
Public Benefits Charge	\$0.66
Revenue Requirement	\$21.49

IID rates are forecast to increase by 5% which is a conservative assumption given both recent rate history and the investments IID will need to make in infrastructure and renewable energy in support of electrification over the next 20 years. Figure 1.4 shows that once there is sufficient load growth, the municipal utility can offer lower rates compared with forecast IID rates. The figure also shows IID rates with a slower growth rate of 3% per year.

FIGURE 1.4: PROJECTED RETAIL RATES 2025-2044



1.5 CITY SERVICE TO EXISTING AREAS SERVED BY IID

This Study evaluates options for providing electric service to the EDZ and undeveloped and underserved areas of the City (*i.e.*, greenfield), as identified in the City's service territory map adopted by the City Council at the time the City Municipal Utility was formed in 2019. The Municipal Utility would have risks associated with load growth and the ability to obtain financing for start-up and construction costs in conjunction with serving the EDZ and greenfield, or alternatively, the City could serve the developed areas of the City where IID provides existing service. Extending the City Municipal Utility to this area would require the City to negotiate and purchase the existing substation, distribution, and potentially transmission assets within the municipal boundaries from IID and/or pursue an eminent domain action of those assets. With these assets and associated future revenues, the City could finance expansion into the greenfield area of the City. In anticipation of acquisition being contemplated as part of the City's potential options going forward, general estimates are provided herein as a starting point.

TABLE 1.2: ROUGH CONDEMNATION FIGURES

	Cost Estimate	Notes
Distribution System Value	\$5,000-\$10,000/electric customer \$150 Million	Plant actually valued between original cost less depreciation and replacement cost less depreciation. Cost changes if substation and transmission assets are included.
Separation Costs	\$30 Million	Assumed 20% of system value.
Stranded Costs	Unknown	Needs further study but can include generation, transmission, and distribution.
Total	\$180+ Million	

This path would provide a means for borrowing and could be a long-term solution related to the uncertainty of IID's future in the Coachella Valley.

The timetable for developing a fair market value for the IID assets is 9 months to a year, depending on the cooperation of IID to provide information that is often considered confidential regarding the physical system within the City limits and the energy consumed by homes and business within the City. If both parties negotiate to a reasonable outcome, the acquisition could be completed in 2 to 3 years. However, if there is litigation, the duration can extend for 5 or more years.

1.6 NEXT STEPS

If the City decides to pursue energizing the municipal electric utility, the following next steps could be taken:

1. The City could explore acquisition of IID assets to service the entire City of Coachella.
2. The City could move forward with a limited municipal utility such as described in this study and issue request for proposals for power supply.

All options presented herein require financing, which is a significant hurdle. A next step greenfield municipal utility would be to explore financing options such as those used by the CCAs in California. This

can be accomplished by issuing a request for proposals to determine feasibility of financing start-up and construction costs.

Also, for the greenfield municipal utility, the City needs to initiate a conversation with IID regarding access to the transmission grid for wheeling power. This could be in the form of an application to interconnect. The initiation of this process will help to define the next steps needed if the City wishes to pursue this option.

The above next steps could be completed concurrently to further assess the viability of each path.

2 Study Framework

The City of Coachella (City) seeks to ensure that its residents and businesses receive utility services that meet their current needs and provide electric utility supply for the future needs of the community at fair and reasonable rates. Thus, in 2019, the City established a municipal utility to provide electric service within the City, with an initial focus on new development areas (City Resolution No. 2019-62). The City is currently considering options for providing electric service to new customers locating in primarily undeveloped areas of the City (i.e., “greenfield” areas). This Study evaluates two options for energizing a greenfield utility within part of the City’s boundaries:

2.1 PUBLIC MUNICIPAL UTILITY

This option calls for the City to construct new substations and the required distribution facilities, and procure power supply delivered through either wheeling via existing IID infrastructure, if available, or through new facilities that interconnect to Southern California Edison’s (SCE) transmission voltage lines located east of the City.

2.2 STUDY FRAMEWORK

The analytical construct includes the following assumptions.

1. Three scenarios for municipalization are evaluated from an economic perspective:
 - a. Base load forecast estimated from City’s current development queue.
 - b. Low load forecast is half of the Base scenario representing an unfavorable economy.
 - c. High load forecast which adds additional industrial load development.
2. As a greenfield utility, the municipal electric utility would not pay any generation or distribution asset stranding costs to IID. It is assumed that any other fees or costs imposed by the State of California will be applied. At this time, no such fees or costs have been defined or included in the Study.
3. As a greenfield utility, the City would not purchase existing IID distribution facilities.
4. Cost for the extension of distribution facilities includes transformers, meters, and services are assumed to be 100% assignable to new customers.
5. Operating costs and financing for the City’s municipal utility are estimated based on current borrowing markets and other California municipal utility budget information.
6. The City’s electric rates are based on expenses and debt service coverage requirements. Any difference between the City’s rates and IID forecast rates can be used for customer programs, rate savings, or additional development by increasing the City’s rates to match or be slightly lower than IID.
7. The illustrative forecast of IID rates are based on current approved IID rate levels with a 5% annual increase over the study period. Recent historic IID rate increases have averaged approximately 6% per year.

2.2.1 Data Limitations

This Study is conducted with varying degrees of data quality. Forecast loads are provided with a large range of potential build-out scenarios. Growth in the Study area may or may not materialize depending on a wide range of economic factors.

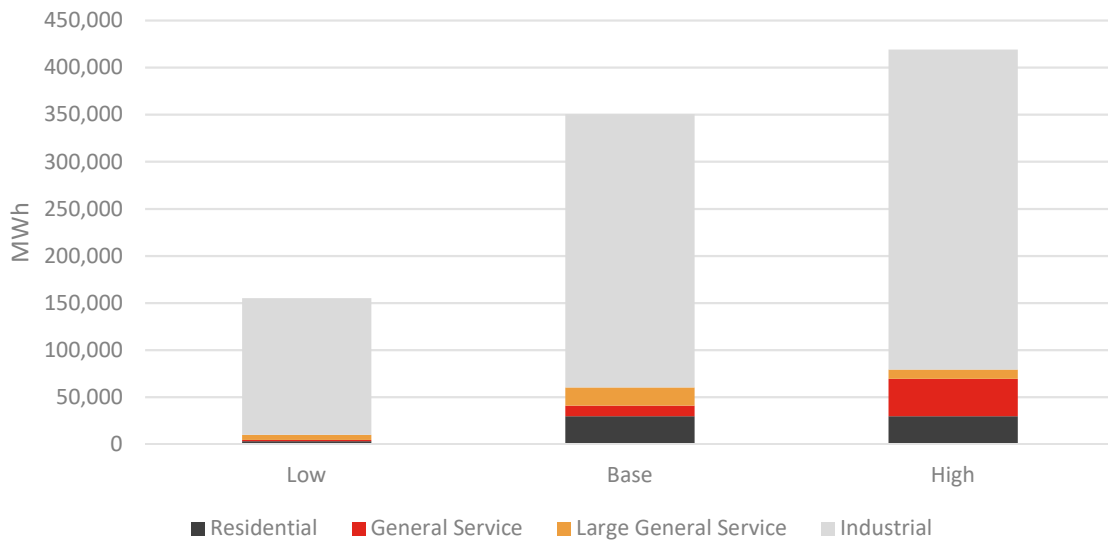
2.3 SYSTEM LOAD FORECAST

A forecast of electrical load was made for the area within the City's Municipal Utility Service Area as shown in Figure 1.1 To determine future energy usage for this area, multiple sources were referenced including the City's development queue. After year 10, moderate growth is assumed. The peak demand is calculated using a load factor of 65%. This load factor is higher than the load factor IID assumed in its 2018 IRP (50%) since expected load growth is primarily higher load factor loads (cannabis). Based on City's development queue, cannabis loads could reach 300 MW; however, with the changes in planning environment since COVID-19, it is largely believed that cannabis operations will not materialize as indicated in the queue. More likely, the industrial growth will be more diversified. The Study assumes general load factor data for industrial processes which may or may not include some portion attributed to cannabis operations.

There are two Economic Development Zones (EDZ) within the boundaries of the City's municipal utility. One is known as the Auto Wrecker Zone (northern most EDZ) and the second is the Industrial Zone (between Avenue 52 and Avenue 54). The anticipated cannabis growth operation load within the Auto Wrecking Zone is 33 MW. Meanwhile, the Industrial Zone is anticipated to serve approximately 30 MW of new commercial load retailed to the cannabis grow operations. None of the existing IID customers in the Industrial Zone are included in the Study. The Study does project an additional 11 MW of retail load within the proposed municipal boundary.

The ramp-up from not serving customers to serving customers with significant energy requirements is difficult to predict. For this Study, it is assumed to be 3 years. The infrastructure for electric service (substations and/or generating facilities) will need to be under development or possibly completed to assure new customers of the viability of the City Municipal System. It is assumed that three years will be necessary for the construction of commercial buildings plus ramp up to full operation for initial customers.

Figure 2.1 illustrates the forecast energy breakdown for the mid-point of the 20-year study.

FIGURE 2.1: LOAD FORECAST COMPARISON FOR THE MID-POINT OF THE 20-YEAR STUDY

Figures 2.2 and 2.3 compare the energy and peak demand forecasts over the 20-year study period.

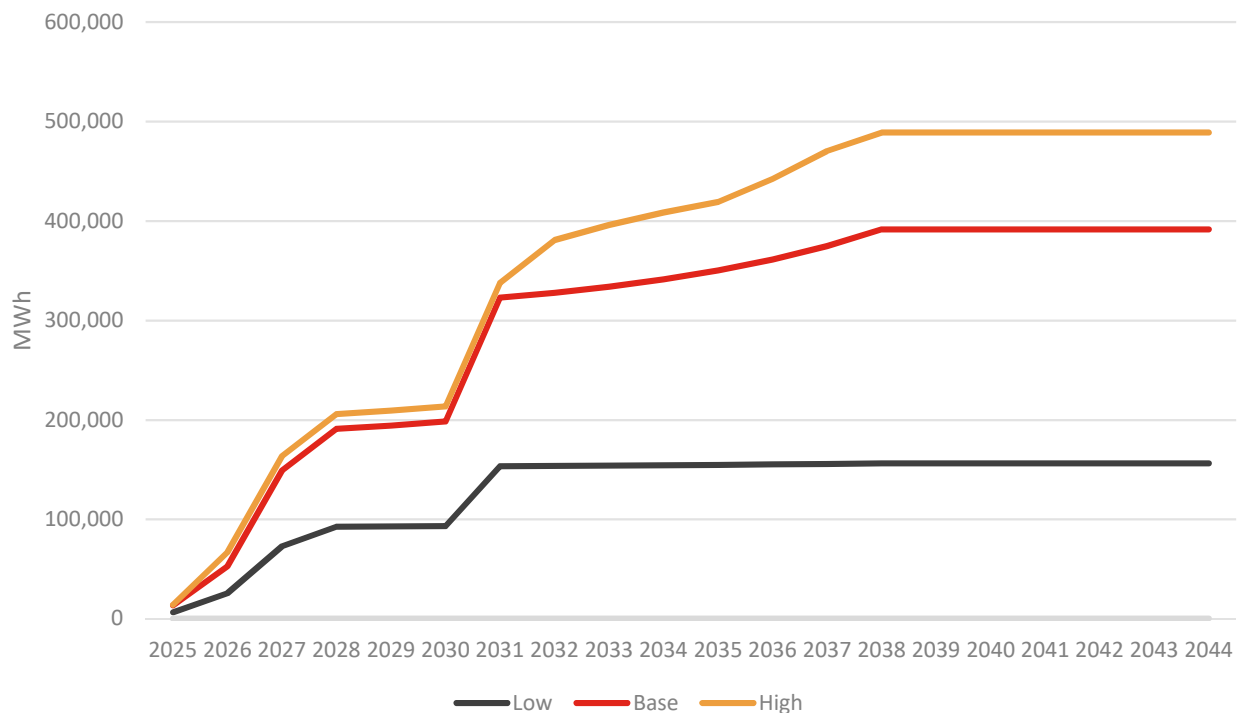
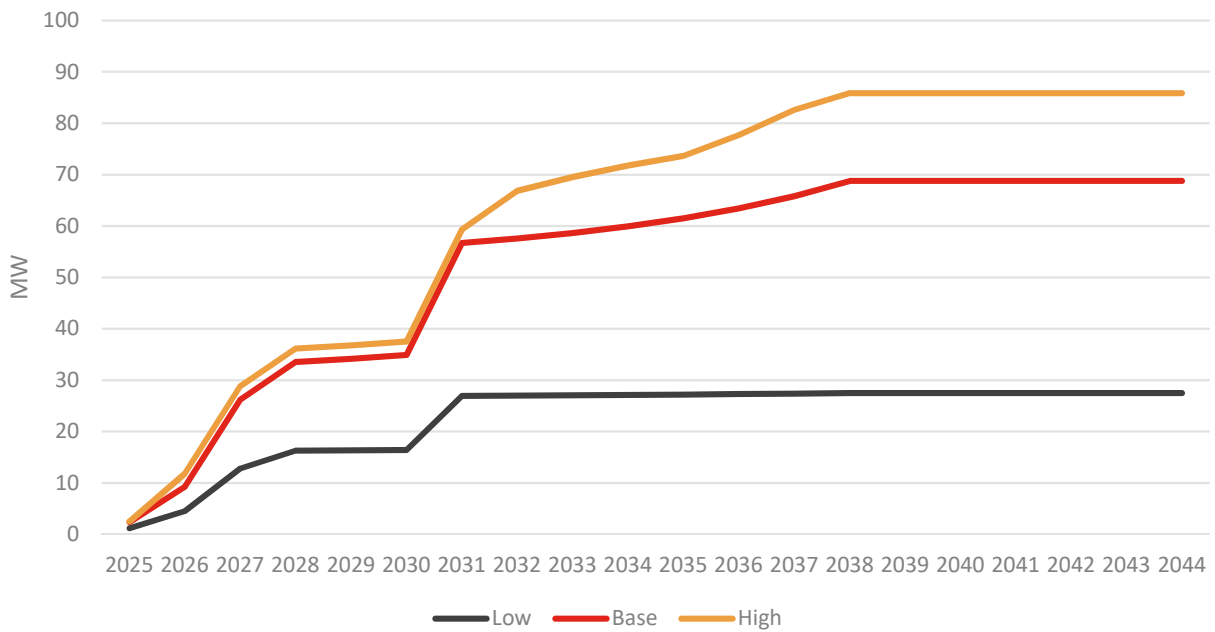
FIGURE 2.2: 20-YEAR LOAD FORECAST COMPARISON

FIGURE 2.3: 20-YEAR PEAK DEMAND FORECASTS

Distribution line losses of 3% were added to retail sales to develop the system load forecast.

3 Public Municipal Utility

3.1 NEW CONSTRUCTION BY THE CITY

The City would need to build new substations and interconnect them to IID's existing 92kV transmissions in the vicinity of these substations. IID sells available transmission capacity to other entities that need IID lines to transport energy. IID offers point-to-point transmission service that uses IID's transmission facilities. This type of service can be used for the transportation of capacity and energy into, out of, through or within IID system.³ EES has investigated the IID transmission system and believes there is capacity for at least 40 MW in this portion of IID transmission system. However, IID has not confirmed that it has sufficient capacity available. Further, IID determination of the available transmission capacity (ATC) takes into account the firm capacity set aside to serve peak native load forecast commitments.⁴ The fact that the City has created a greenfield municipal utility should allow access to ATC which EES believes exists in this portion of their system. The ability of the City to obtain delivery from IID is unknown and presents a risk for energizing the City utility.

A proposed new Harrison Substation would be serving the load in what is known as the Auto Wrecker Zone (northern most EDZ). The anticipated cannabis growth operation load within the Auto Wrecking Zone is 30 MW. In addition, this substation could be used to serve future development of retail electric service outside the Auto Wrecking Zone. The station would be configured for two 40 MVA power transformers and 12 (twelve) 12.5 kV feeders.

A new Polk Substation, to be located in the Industrial Zone EDZ, is anticipated to serve approximately 30 MW of new commercial load retailed to cannabis grow operations and an additional retail load within the proposed municipal boundary. The station would be configured for two 40 MVA power transformers and twelve 12.5 kV feeders.

It is assumed that the design of the substations will meet an N-1 criterion (loss of any one system component and maintain electric service). The distribution feeders should also meet this N-1 criterion to the extent financially feasible.

As the load requirements approach the limit of available transmission capacity from IID, the City would need to obtain additional capacity at the Southern California Edison (SCE) 230kV line at or near the Coachella Valley Substation. The 20-year projected load in the Study is 70 MW and the expected capacity of a 92kV transmission line would be about 150 MW. Thus, a 230/92kV substation would be constructed and 92kV lines extended to the two new distribution substations (Harrison and Polk). The estimated distance of single pole 92kV transmission is 7.2 miles. Approximately 3.5 miles would have a single 92kV circuit with space for two distribution circuits on the structures. The other 3.7 miles would be double circuit 92kV with space for two distribution circuits on the structures. A typical width for a 92kV

³ <https://www.iid.com/energy/transmission-access/transmission-service>

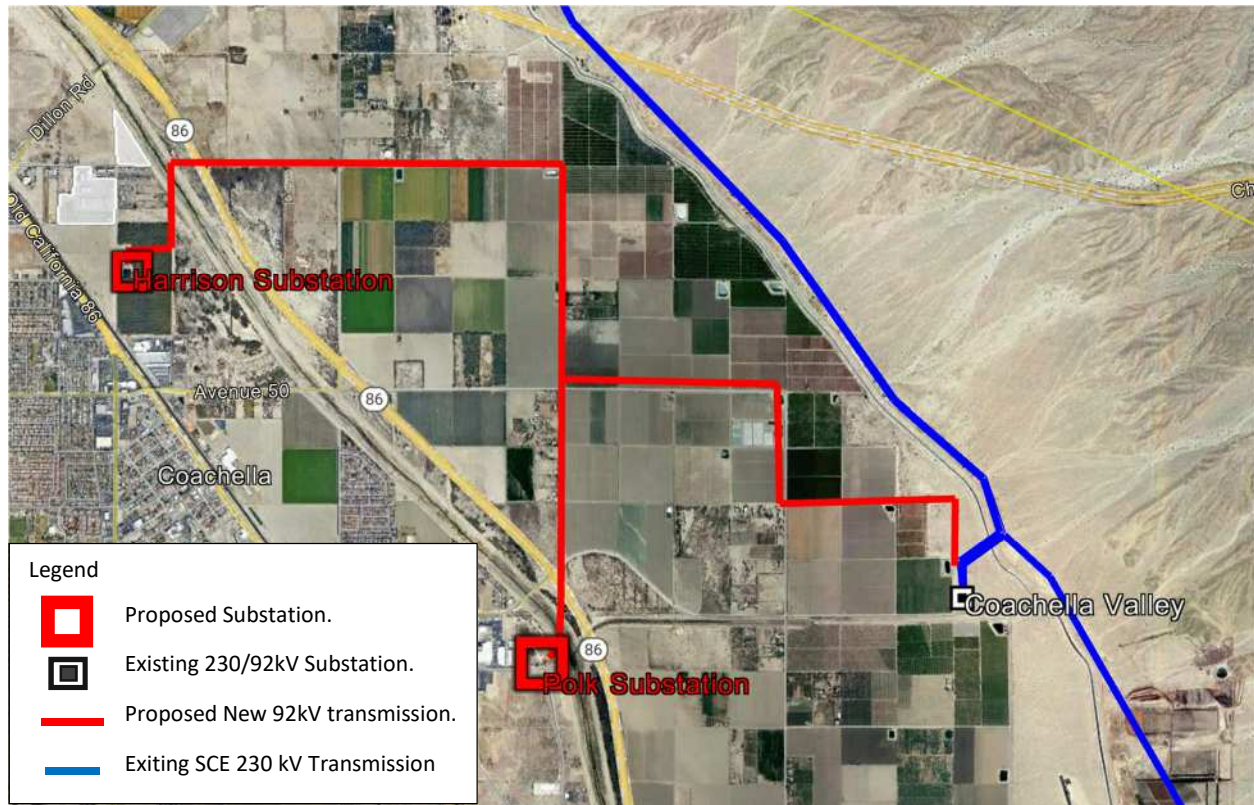
⁴ Available Transfer Capability Implementation Document (ATCID) dated 4/15/2022

transmission line is 100 feet. Therefore, the loop would likely require acquisition of roughly a 50-foot strip easement. The other 50 feet will be located within the road right-of-way based on the proposed routing of the line. The cost of land acquisition is included in the transmission line construction estimate.

If at the time of construction, the load within the utility boundary is expected to exceed 150 MW, then 230kV transmission would be warranted.

Figure 3.1 depicts the location of the proposed substations and the route of the 92kV transmission.

FIGURE 3.1: NEW MUNICIPAL UTILITY INFRASTRUCTURE



It is estimated that the construction of the substations needed to wheel energy through IID's 92kV transmission line would cost roughly \$16M. After 5 or more years when the capacity requirements of the City exceed the available transmission capacity, a 230 kV interconnection will be made along with transmission to service the Harrison Polk and disconnect service from IID. The actual timing of capital expenditure will be driven by load requirements. However, for the Study, it is assumed that a capital expenditure of another \$32.7M dollars would be required in the 5th year of the Study.

3.2 POWER SUPPLY & TRANSMISSION

Power supply and transmission includes all costs for power supply and related services to the municipal utility's distribution system. Costs for power scheduling are also included in the power supply cost estimates. The City could procure its power supply requirements using different strategies including fixed price/delivery contracts, all-inclusive power supply contracts, or a mix of generation and power purchases. The selected strategies would be guided by the City's objectives and ultimately approved by City Council.

Actual power supply contract arrangements are not specified for the purposes of this Study; however, the pricing estimates are described below.

3.2.1 Power Purchases

Costs for energy purchased to meet municipal utility load are estimated at market prices for the SP15 (South Path 15) area. Block energy purchases are valued at \$80/MWh in 2025 based on current forward prices. This value decreases in the first 5 years of the Study until it reaches \$65/MWh in 2030. This decrease reflects that the current market prices are historically high and are expected to reduce as supply and demand markets settle out. After 2030, prices are escalated at 3% per year. The levelized cost of market purchases is \$81/MWh over the 20-year study period.

Capacity services, including resource adequacy, are estimated to cost \$8.86/kW-month based on the CPUC Market Price Benchmark for 2023 and escalated at 3% annually. This figure is a weighted average for system, flex, and local resource adequacy all together. This value is included for 117.5% of the municipal utility's capacity requirements to cover the planning margin.

3.2.2 Renewable Energy

Per California's Renewable Portfolio Standards (RPS), electric utilities must purchase a volume of renewable energy equal to at least 60% of retail sales by 2030. The requirement ramps up from 46.7% in 2025. Renewable energy purchases are split between long-term and short-term contracts for Portfolio Content Category 1 (PCC1) and Portfolio Content Category 2 (PCC2). The City may purchase Portfolio Content Category 3 (PCC3) RECs at lower cost; however, this option is not evaluated in the Study. Long-term renewable energy is priced conservatively at \$42/MWh. Long-term renewable contract prices have increased since the last study due to supply chain issues and general inflation. Still, this price assumption would allow for solar plus storage or wind resources. The City must meet 60% of its renewable energy requirement from long-term contracts. Because long-term contracts are priced lower than short-term, it is assumed that the City would purchase 75% of its renewable energy requirement through long-term contracts.

The Study assumes the City would wheel long-term bundled energy via IID until the SCE intertie is completed. Once the City has constructed the intertie with SCE, the City would wheel this energy via SCE to the 230 kV line at a cost of \$15-\$16/MWh (described below). If the City were able to develop local renewable projects for less than \$57/MWh, renewable energy costs could be reduced from the base case assumptions.

3.2.3 Resource Adequacy

Capacity services are estimated to cost \$8.86/kW-month based on the CPUC Market Price Benchmark for 2023 and escalated at 3% annually. This figure is a weighted average for system, flex, and local resource adequacy all together. This value is included for 117% of the municipal utility's capacity requirements to cover the planning margin.

3.2.4 CAISO Charges and Misc.

The utility would need to pay CAISO charges estimated at \$6/MWh in 2025. Power scheduling would be needed to balance energy purchases on an hourly basis. Schedule coordinator costs of \$100,000 per year are included for the first year of operation increasing by 10% per year due to projected load growth.

3.2.5 Wheeling and OATT

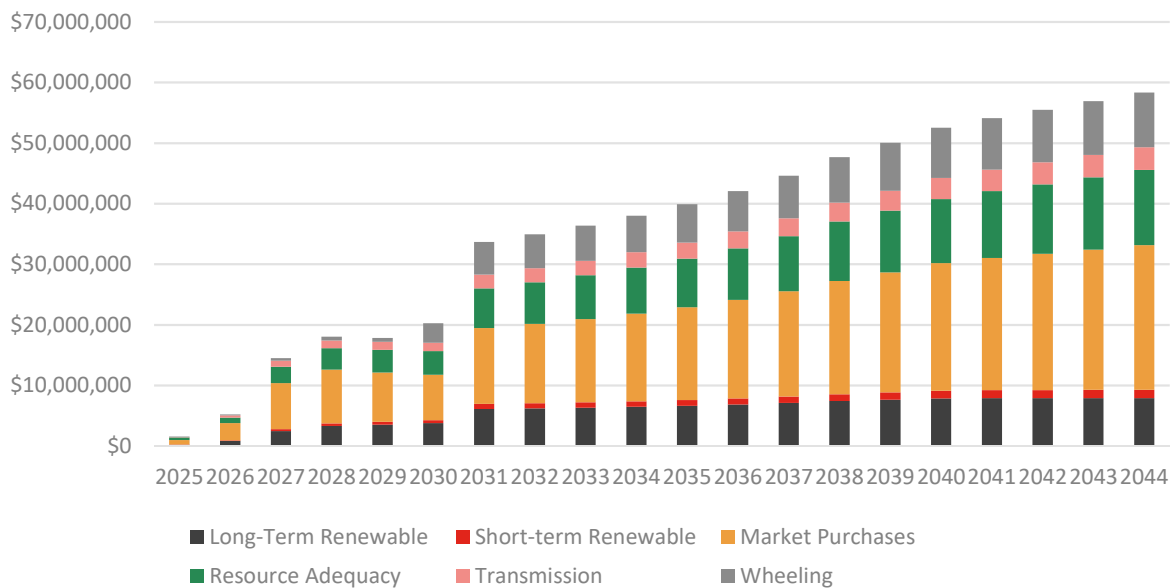
When using IID's 92kV line to deliver power, the City would pay IID's Open Access Transmission Tariff (OATT). IID's current long-term and short-term point-to-point tariff is \$1.69/kW-month.⁵ This cost is escalated at 2% per year and applied to the City's monthly peak demand. This cost is in addition to the CAISO costs.

Once the 230kV interconnection with the SCE system is complete with accompanying transmission lines, the Municipal Utility would pay SCE's high-voltage wheeling rate. This rate is currently \$14.4157/MWh.⁶ The high voltage rate is applied to the municipal utility's load in addition to the CAISO costs.

3.2.6 Summary of Power Costs

Figure 3.2 summarizes the power costs estimates.

FIGURE 3.2: CITY UTILITY POWER SUPPLY COSTS



3.3 DISTRIBUTION SYSTEM O&M

Distribution expenses include all costs to operate and maintain the distribution system including substations. Distribution O&M costs were estimated by looking at comparable preference utilities. Distribution O&M per customer and by customer class was taken from cost of service analyses from three comparable municipal utilities. These costs were then applied to the City's utility. The total Distribution

⁵ http://www.oasis.oati.com/woa/docs/IID/IIDdocs/IID_OATT_Effective_12.01.2020.pdf

⁶ <http://www.caiso.com/Documents/WheelingAccessRatesEffectiveJan012023R3.pdf>

O&M costs were then broken down into labor and equipment costs. Labor costs include a portion of salaries and benefits for personnel in the operations and engineering departments. Material and equipment costs include the cost of operating and maintaining fleet vehicles and other construction equipment.

3.4 CUSTOMER SERVICE

Customer service expenses include labor and expenses incurred to provide customer service such as billing, meter reading, customer information and advertising, records and collection. Customer service costs may vary by type of account based on usage profile or meter type. For example, a large industrial customer with a special contract for rates would require significantly more resources to bill compared with the average residential customer on a general rate schedule.

3.5 ADMINISTRATIVE & GENERAL EXPENSE

Administrative and General (A&G) expenses include all other labor and expenses necessary to run the electric utility. Labor includes personnel in billing/customer service, accounting, information systems, and management. Office supplies and equipment includes the cost of purchasing (in the case of consumables such as paper and toner) or depreciation (in the case of depreciable assets such as computers, printers, and furniture). Facilities O&M includes the cost of operating and maintaining office space to house new employees. Miscellaneous costs include other administrative and general expenses not included in the categories listed above such as maintenance and depreciation of additional modules for the City's new billing/CIS system necessary for the electric utility.

3.6 PUBLIC BENEFITS CHARGE

In accordance with Assembly Bill 1890, IID collects a 2.85% public benefits charge from its customers. The municipal utility would also collect this charge; therefore, it is included in both the revenue requirement and retail rate revenues.

3.7 PROPERTY TAXES AND FRANCHISE FEES

California law generally allows local governments to own and operate electric utility systems free of property taxes and without the need for local franchises and associated franchise fees. Currently, there is no franchise fee payment from IID to the City; the City is not compensated for IID's use of City assets. However, once the municipal utility is energized, it can collect a franchise fee through retail rates and transfer funds to the City's general fund to compensate the City for use of its facilities. Voters can approve any level of franchise fee; however, this Study assumes the fee is 8% of retail revenue

3.8 CAPITAL IMPROVEMENT PROJECTS

In addition, to the capital projects needed to create the municipal electric system previously discussed in Section 3.1, the City would need to plan for routine capital projects for regular repair and replacements. Capital improvement expenses are assumed to be equal to the annual depreciation value for current distribution assets. Capital improvement expenses begins at \$0.4 million in 2025 and increases 3% annually.

3.9 NON-OPERATING EXPENSES

Non-Operating Expenses include debt service and miscellaneous revenues. These are discussed below.

3.9.1 Debt Service

It is understood that the City has challenges in obtaining bonds for this type of endeavor. However, for the sake of the financial feasibility analysis, it is assumed that bond financing can be obtained.

The bond issuance is assumed to include the following:

- Construction Costs
- Debt Service Reserve (1 year's debt service)
- Capitalized Interest (2 months debt service)
- Start-Up Costs
- O&M Reserve (3 months O&M)
- Accrued Interest (1/2 month debt service)
- Underwriters Fees (1% of Par on Bonds)
- Bond Insurance (1.25% of Total Debt Service Payments)
- Cash for Working Capital

Several of these are dependent on the size of the bond issue and the basis is shown. The Operations and Maintenance Fund and Reserve are based on the O&M level. The Fund is for the first month's O&M payments (salaries, supplies, fees) expected to be incurred in advance of receiving revenues. Bond issuers demand an O&M Reserve in case revenues are below expected levels.

The Construction costs are the costs of a new substations as described in this report. The bond would be a combination of the new substations required initially at start-up and the future 230kV interconnection with SCE and accompanying transmissions. For this Study, a single bond was assumed. However, it may be possible to separate the bonds where the initial bond covers the \$13M for the new substations and all other costs described. Once load growth occurs, the City would then obtain a bond for the \$57 million needed for the SCE interconnection, 230/92kV substation and 92kV transmission lines. Especially since the timing of the interconnection with SCE is dependent on the load growth and not specific time in the future.

Start-up costs are the costs of beginning utility service and may include the cost of purchasing trucks, equipment, supplies, and hiring employees. Start-up costs are estimated at \$2 million.

3.9.2 Bond Issuance

Table 3.1 shows the components of the bond issue. Other than the construction cost, one of the largest components of the bond issue is the cash for working capital at \$5 million. This cash is needed to pay expenses monthly where utility billing collects revenue on a 2-to-3-month lag.

TABLE 3.1: COMPONENTS OF BOND ISSUE, MILLIONS

Construction Cost	\$48.6
Debt Service Reserve	\$3.9
Capitalized Interest (2 months)	\$0.4
Start-Up Costs	\$2.0
O&M Reserve Fund (3 months)	\$0.7
Cash for Working Capital	\$5.0
Accrued Interest (1/2 month)	\$0.1
Underwriter's Discount (1%)	\$0.5
Bond Issuance	\$0.6
Total Bond Issue	\$61.7

Acquisition interest rates are assumed to be a taxable rate of 5%. This rate is also used for the assumed return on funds invested in the debt service reserve fund.

In the case where the City utility funds the substations and transmission upgrades, the initial bond financing is \$61.7 million. The proforma analysis assumes that the initial bond includes only the portion associated with the substations. Once load growth reaches 40 MW, the bond is refinanced and includes the total amount for the SCE intertie.

3.10 ANNUAL BUDGET

The resulting budget is shown for the first 5 years of the Study in Table 3.2.

TABLE 3.2: CITY MUNICIPAL UTILITY REVENUE REQUIREMENT, MILLIONS

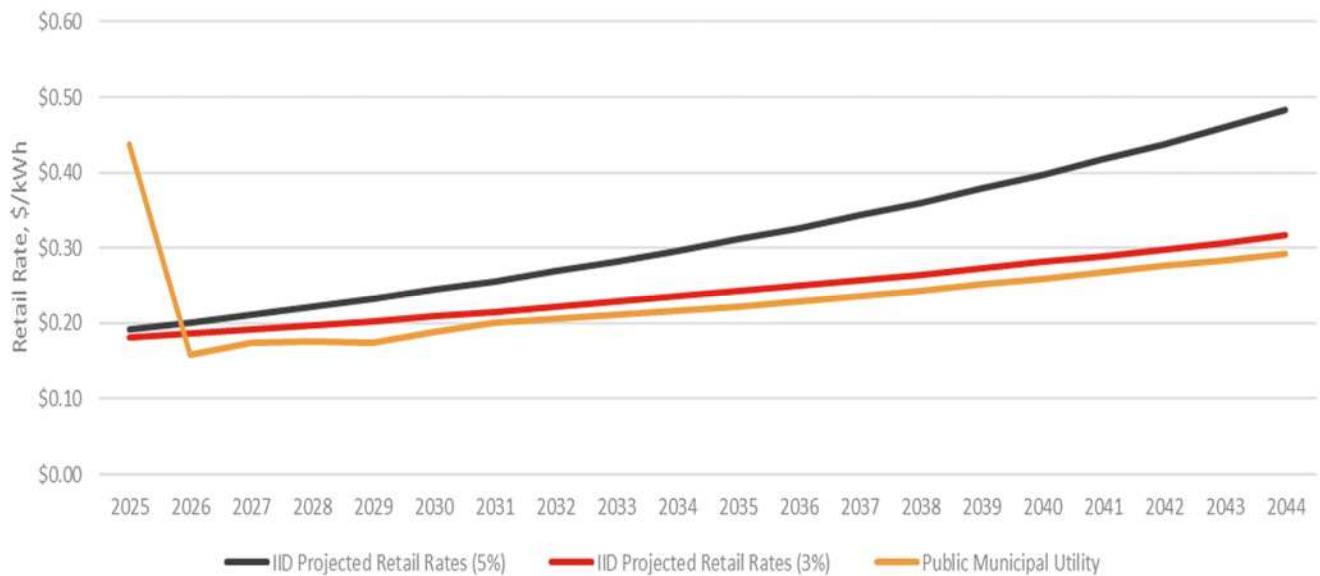
	2025	2026	2027	2028	2029
Power Supply & Transmission	\$1.63	\$5.29	\$14.64	\$18.15	\$17.95
Distribution O&M	\$0.70	\$0.74	\$1.47	\$1.54	\$1.62
Customer Service	\$0.20	\$0.21	\$0.25	\$0.26	\$0.28
A&G	\$0.20	\$0.21	\$0.32	\$0.35	\$0.38
Capital Improvement	\$0.53	\$0.55	\$0.56	\$0.58	\$0.60
Debt Service	\$1.89	\$1.89	\$1.89	\$4.43	\$4.43
Franchise Fee	\$0.42	\$0.74	\$1.59	\$2.10	\$2.10
Taxes	\$0.10	\$0.10	\$0.11	\$0.11	\$0.11
Public Benefits Charge	\$0.06	\$0.24	\$0.66	\$0.85	\$0.86
Revenue Requirement	\$5.74	\$9.96	\$21.49	\$28.37	\$28.33

4 Comparison of Results and Sensitivity Analysis

4.1 BASE RESULTS

Figure 4.1 compares the forecast retail rates under two service scenarios: IID and Public Municipal Utility. As the load grows over time, the average rate decreases for the municipal utility scenario. The City would charge rates that recover the cost of service. The cost of service by the City is expected to be much lower than service by IID, even if IID rates were to only increase 3% annually compared with 5%. In order for the City's expenses to be lower than IID retail rates, loads need to reach 55,000 MWh prior to the SCE Intertie.

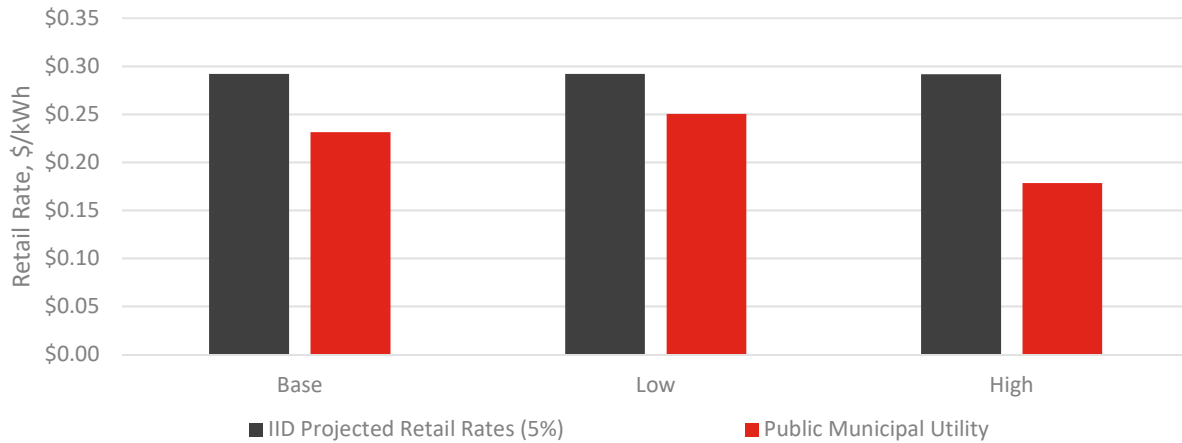
FIGURE 4.1: PROJECTED RETAIL RATES, BASE LOAD FORECAST



4.1.1 Load Sensitivity

Because the average retail rate for the municipal utility decreases as load increases, a sensitivity analysis is performed using the load scenarios described previously. Load estimates appear to have the largest impact on the viability of the municipal electric utility. The three load scenarios shown in Figure 4.2 are analyzed.

The projected rates assume a margin municipal rate to meet standard debt service coverages but the City could select a higher rate to dedicate revenue for program expansions including operating capital energy efficiency or other programs as determined by the City.

FIGURE 4.2: LOAD SENSITIVITY, LEVELIZED CITY UTILITY EXPENSES 2025-2044

4.1.1.1 Break-Even Analysis

As part of the load sensitivity, it is informative to evaluate very low load forecasts. At a certain load threshold, there will be a break-even point with forecast IID rates. The analysis determines the break-even point equal to the load required to charge retail rates equal to IID and recover minimum operating costs. Some years the City electric rates may exceed forecast IID rates, but on average the rates are similar.

The break-even load requirement for the greenfield utility is 30,000 MWh/year (5 MW). At this load level, the City would not need to construct the intertie with SCE and would continue to wheel through IID. If IID rates increase at 3% per year, the break-even load requirement increases to 55,000 MWh (9 MW). If peak demand exceeds 40 MW, the SCE intertie will need to be constructed.

4.1.2 Power Supply Cost Sensitivity

Power supply costs are estimated to average \$81/MWh over the next 20 years (levelized cost). The sensitivity analysis evaluates lower and higher power costs and their impact on the municipal utility's choice of power supply options.

5 Risks and Challenges

5.1 WHEELING OVER IID'S 92KV LINE

EES has investigated the IID transmission system and believes there is capacity for at least 40 MW in this portion of IID transmission system. However, IID has not confirmed that it has sufficient capacity available. Further, IID determination of the available transmission capacity (ATC) takes into account the firm capacity set aside to serve peak native Load forecast commitments.⁷ The fact that the City has created a greenfield municipal utility should allow access to ATC that IID may have set aside for themselves to serve the load. If, through appropriate processes, it is determined that capacity on the IID system is not available to the City, the City would need to construct the 230kV line for interconnection with SCE at the initial start-up. This would increase initial capital needs. Ultimately, investigation of IID's capacity as well as access to the capacity could delay the City from providing electric service to new customers.

If the capacity is available as predicted, there is a possibility that there will be challenges in obtaining interconnection with IID. In this case, the City would need to pursue FERC enforcement of IID's OATT. FERC Order 888 requires that any utility with capacity available, and under FERC jurisdiction, make available capacity to requested interconnections under standard tariffs. If the City needs to pursue FERC enforcement, energizing the new utility would be delayed and the costs of litigation would decrease the feasibility. Delays such as this may also have negative impacts on load growth potential.

5.2 LOAD GROWTH

Under municipalization, the City bears the full risk of load development throughout the Study period. If loads do not materialize, it will be difficult for the electric utility to cover the costs of the infrastructure investments without significantly increasing retail rates. If there are fewer customers, there is no base from which to generate income. Feasibility requires at least 30,000 MWh of annual load. The City is also incentivized for marketing to new developers, but the City may have limited resources for the marketing necessary to obtain new large customers.

In addition, historically, much of the projected load was expected to materialize from the cannabis grow industry. If alternative industrial customers replace cannabis grow footprint, the energy intensity of the loads could significantly decrease creating the risk that the minimum load is not reached. Cannabis grow operations typically use 100-200 kWh/square foot of floor space. Data centers or cryptocurrency loads are also high intensity and could create opportunities for base load customer growth. Other typical industrial uses are much lower ranging from 8-50 kWh/square foot depending on process.

5.3 BOND FINANCING

In order to begin serving customers, the City would need to finance substation and the transmission upgrades. The feasibility of obtaining the required debt financing should be evaluated in more detail.

⁷ Available Transfer Capability Implementation Document (ATCID) dated 4/15/2022

The financing process may look similar to the financing process community choice aggregators pursue. Typically, the municipal utility would issue a request for proposals for start-up financing. The RFP would include background on the utility's business plan and projected loads and retail rates. Responses would be evaluated and one or more respondents selected for further analysis. The lenders would begin their due diligence process of reviewing the financials, projections, and risk analysis. In some cases, the banks require the borrower to pay the cost of a third-party review of the financials.

Ultimately, there is the risk that qualifying banks would not respond. Additionally, interest rates could be higher than expected, or banks may require significant collateral and/or lockbox arrangements to secure the borrowed funds. Since the City utility would be borrowing to support future growth, the growth projection will be a key factor in obtaining financing. All of these uncertainties together mean that the cost of financing the needed infrastructure investment could be not only higher than what is assumed in this Study, but also could be infeasible due to the current industry growth projections.

The Study does not consider the bonding capacity of the City or market interest in this type of project.

5.4 RESOURCE ADEQUACY COSTS

The Study assumes that all capacity requirements are procured through bilateral contracts. The price for RA in this Study is based on the market price benchmarks calculated by the CPUC. RA prices have increased dramatically in the past 5-6 years. Recent market transactions for RA have exceeded \$50/kW-month, or nearly 4 times the price assumed in this Study.

6 Summary

Based on the results of this Study, the following observations are made:

Considerations	
Access to IID Capacity	Initial plan is to use capacity from IID's 92kV transmission. If access is denied, accelerate SCE interconnection.
Load Growth Risk	Break-even threshold is 55,000 MWh with annual 5% IID rate increases.
Change in Load Mix	Cannabis is High Density Energy Needs 100-200 kWh/sq.ft. Traditional Industrial/Commercial 8-50 kWh/sq.ft. Even with reductions in high density load, the City could likely achieve breakeven sales threshold of 55,000 MWh.
New Municipal Utility	IID can challenge new utility. Limiting to greenspace-only rather than acquisition of IID customers does not eliminate the uncertainty.
Initial Financing	\$67.3 M
RPS Requirements	Purchase from interconnection with IID or SCE.
Customer Funded Distribution Lines	Customers will need to contribute 100% for distribution facilities to serve new load.
Reliability	Transmission feed radial is a weak point.
Resource Adequacy	City must rely on bilateral transactions for RA subject to price risk.

For next steps and options, see Section 1.6

7 References

City of Coachella. General Plan. Available at: <https://www.coachella.org/services/document-central/-folder-165>

California Energy Commission. Renewable Portfolio Standard Eligibility. Commission Guidebook. January 2011. [www.pge.com/includes/docs/pdfs/b2b/wholesaleelectricssuppliersolicitation/RPS/CEC-300-2010-007-CMF\[1\].pdf](http://www.pge.com/includes/docs/pdfs/b2b/wholesaleelectricssuppliersolicitation/RPS/CEC-300-2010-007-CMF[1].pdf)

California Air Resources Board. <https://ww2.arb.ca.gov/resources/documents/enforcement-policy>

Energy Information Administration. Southern California Natural Gas Prices Accessed May 5, 2023. <https://www.eia.gov/special/disruptions/socal/winter/#:~:text=The%20spot%20price%20of%20natural,hub%E2%80%94averaged%20%243.43%2FMMBtu.>

Imperial Irrigation District Open Access Tariff. http://www.oasis.oati.com/woa/docs/IID/IIDdocs/IID_OATT_Effective_12.01.2020.pdf

Imperial Irrigation District website. Transmission Access. <https://www.iid.com/energy/transmission-access/transmission-service>

Judicial Council of California Civil Jury Instructions (May 2020 supplement). “CACI No. 3501.” Available at: <https://www.justia.com/trials-litigation/docs/caci/3500/3501/>

Southern California Edison wheeling rates. <http://www.caiso.com/Documents/WheelingAccessRatesEffectiveJan012023R3.pdf>

U.S. Bureau of the Census. City of Coachella, California. Estimate July 2019. <https://www.census.gov/quickfacts/coachellacitycalifornia>

Whitman, Requardt and Associates. *Handy-Whitman Index of Public Utility Construction Costs*. Bulletin No. 191. Baltimore, MD. 2022.

8 Glossary of Terms

AB: Assembly Bill

Ancillary Services: Those services necessary to support the transmission of electric power from seller to purchaser given the obligations of control areas and transmitting utilities within those control areas to maintain reliable operations of the interconnected transmission system.

Auto Wrecker Zone: Northern most EDZ (Economic Development Zone).

Base Case: The base case is defined as the expected case involving expected power prices and electric loads.

Bundled: Receive all their services (transmission, distribution and supply) from the Investor-Owned Utility.

California Independent System Operator (CAISO): The organization responsible for managing the electricity grid and system reliability within the former service territories of the three California IOUs.

City: City of Coachella

Firming: Firm capacity is the amount of energy available for production or transmission that can be (and in many cases must be) guaranteed to be available at a given time. Firm energy refers to the actual energy guaranteed to be available. Firming refers to the financial instrument to change non-firm power to firm power.

Greenfield: Portions within the municipal utility zone that currently do not have electric service such as vacant land.

Green Power Program: IID customer can elect to purchase up to 100% renewable energy from IID through an Energy Cost Adjustment Renewable Billing Factor.

Harrison and Polk: Two new distribution substations.

Industrial Zone: One of the Economic Development zones located between Avenue 52 and Avenue 53.

Intertie: transmission line that forms part of an interconnection.

kV: kilovolt, 1,000 volts, a unit of electrical potential.

kW: Kilowatt, equal to 1,000 watts, is measure of electric demand.

kWh: Kilowatt Hour.

Load Forecast: A forecast of expected load over some future time horizon. Short-term load forecasts are used to determine what supply sources are needed. Longer-term load forecasts are used for budgeting and long-term resource planning.

Load Factor: Ratio of actual energy consumption to maximum possible consumption based on peak electric load.

MW: Megawatt equal to 1,000 kW.

MWh: Megawatt Hours equal to 1,000 kWh.

N-1: Refers to contingency when there is a loss of any one system component to maintain electric service.

Resource Adequacy (RA): The requirement that a Load-Serving Entity own or procure sufficient generating capacity to meet its peak load plus a contingency amount (15% in California) for each month.

Renewable Portfolio Standard (RPS): The state-based requirement to procure a certain percentage of load from RPS-certified renewable resources.

Retail Rates: Rates charged by electric distribution utility for service provided to end-use customers. Retail rates may include distribution, transmission, and power supply services.

Shaping: Function that facilitate and supports the delivery of energy generation to periods when it is needed most.

Wheeling: the transportation of electricity from within an electrical grid to an electrical load outside the grid boundaries.

Wholesale Power: Large amounts of electricity that are bought and sold by utilities and other electric companies in bulk at specific trading hubs. Quantities are measured in MWs, and a standard wholesale contract is for 25 MW for a month during heavy-load or peak hours (7 am to 10 pm, Mon-Sat), or light-load or off-peak hours (all the other hours).

9 Acronyms

A&G:	Administrative and General
ARB:	Air Resource Board
ATC:	Available Transmission Capacity
ECA:	Energy Cost Adjustment
EDZ:	Economic Development Zone
ESA:	Energy Service Agreement
FERC:	Federal Energy Regulatory Commission
IID:	Imperial Irrigation District
OATT:	Open Access Transmission Tariff
O&M:	Operation and Maintenance
NERC:	North American Electric Reliability Corporation
PCC1:	Portfolio Content Category 1
PCC2:	Portfolio Content Category 2
PCC3:	Portfolio Content Category 3
RA:	Resource Adequacy
REC:	Renewable Energy Credit
RPS:	Renewable Portfolio Standard
SCE:	Southern California Edison
SCF:	Standard Cubic Foot is Defined as One Cubic Foot of Gas at 60 °F
SCPPA:	Southern California Public Power Authority
SP15:	South Path 15
TRECS:	Tradeable RECs
WREGIS:	Western Renewable Energy Generation Information System