

NewGen Strategies & Solutions

www.newgenstrategies.net

REQUEST FOR PROPOSALS **COMPREHENSIVE WATER AND WASTEWATER RATE STUDY**

NOVEMBER 19, 2024



Prepared for:
Cástulo Estrada - Utilities Director
City of Coachella
53990 Enterprise Way
Coachella, CA 92236

© 2024 NEWGEN STRATEGIES AND SOLUTIONS, LLC

A. TABLE OF

CONTENTS

A. TABLE OF CONTENTS.....	I
B. TRANSMITTAL COVER LETTER.....	II
C. EXECUTIVE SUMMARY	1
D. KEY PROJECT PERSONNEL	3
E. UNDERSTANDING OF PROJECT.....	6
F. REFERENCES.....	29
G. DISCLOSURE OF CLAIMS / LAWSUITS	31
H. COST PROPOSAL.....	32
I. NO DEVIATIONS FROM THE RFP.....	35



900 Bestgate Road, Ste. 402
Annapolis, MD 21401
Phone: (443) 951-4207

B. TRANSMITTAL COVER LETTER

November 21, 2024

Mr. Cástulo Estrada
Utilities Director
City of Coachella
53990 Enterprise Way
Coachella, CA 92236

Subject: Request for Proposals – Comprehensive Water and Wastewater Rate Study

Dear Mr. Estrada:

The water and sewer utility industries are changing at a rapid pace. Maintaining the current level of service is becoming a challenge given the extreme pressure on operating and capital budgets. These pressures are the inevitable result of the increasing costs of labor, materials, water supplies, wastewater treatment technologies, and major capital assets. To develop a realistic plan to sustain the financial health of the City of Coachella's (City) water and sewer services, what the City needs is a fresh look at everything for both the Coachella Water Authority (CWA) and the Coachella Sanitary District (CSD) - especially the ability to compare different forecast scenarios side-by-side to achieve the best future for its systems.

NewGen Strategies and Solutions, LLC (NewGen) is a management and economic consulting firm specializing in serving the water and sewer utility industry. Established in 2012, NewGen provides nationally recognized expertise in utility cost of service and rate design studies, financial feasibility studies, municipalization and privatization efforts, depreciation and appraisal studies, litigation support for state and federal regulatory proceedings, utility financial planning, and stakeholder engagement. NewGen currently employs 61 full-time professionals.

Why NewGen? *Utility rates are what we do.* NewGen's core business is providing financial and management advice to water, wastewater, stormwater, energy, and solid waste utilities. *Because of our strategic focus, we develop recommendations that are understandable, transparent, and achievable, which paves the way for successful buy-in across all your stakeholders.* NewGen sets itself apart from other firms in the following ways:

Uniquely Qualified Project Team – We have assembled and will commit to the specific performance of our project team, which is comprised of experienced personnel who enjoy a national reputation for their expertise and common-sense advice and local experience providing these services in the Inland Empire. We have extensive experience with setting Proposition 218 compliant water rates. Our designated project manager is an active member of the AWWA Rates and Charges Committee, the Chairman of the Cost Allocation Subcommittee, and a contributing author to the upcoming 8th edition of AWWA's Manual M1.

B. TRANSMITTAL COVER LETTER

Operational Insights – NewGen makes data operational resulting in actionable decisions with defensible results. We harness existing and untapped data to forecast changes in operations, develop demand management strategies, estimate the impacts of capital investments, and identify the rational nexus underlying rate structure decisions. *The link between what your service costs and how you charge your customers is essential for Prop 218 compliance.* NewGen has helped our clients increase revenues to further capital investment, strengthen rate design justifications, and communicate rate change rationale to a public audience.

Stakeholder Communication – NewGen simplifies complex concepts by combining visual tools and our training expertise to ensure that clients gain a deep understanding of how the issues and underlying data drive our recommendations and scenarios. This directly impacts the evaluation of the scenarios we present, streamlines decision-making, and successfully obtains buy-in from elected officials, advisory committees, regulatory bodies, utility senior management, and utility customers.

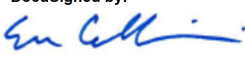
Demonstrated Performance – The issues being faced by CWA and CSD are like those being faced by NewGen’s clients throughout the country and in the State of California. NewGen’s project team members have successfully completed projects similar to the City’s requested services for other California clients.

Client Endorsements – We understand the key issues and challenges facing the City. We have included several references in our proposal and strongly encourage the City to contact them to learn more about our firm and specific project team members.

NewGen is headquartered in Denver, Colorado, and operates 13 offices nationwide. The primary office responsible for completing this project will be NewGen’s Annapolis office, located at 900 Bestgate Road, Suite 402, Annapolis, Maryland 21401. NewGen’s website address is www.newgenstrategies.net.

I am the designated project manager for this engagement, and as a Partner at NewGen I am authorized to bind the firm into contract. Please contact me directly at (443) 951-4207 or by email at ecallocchia@newgenstrategies.net should you have questions or if additional information is needed.

Sincerely,

DocuSigned by:

 C11651334E8F462...
Eric Callocchia
Partner

C. EXECUTIVE SUMMARY

NewGen Strategies and Solutions, LLC is a management and economic consulting firm specializing in serving the utility industry and market. Established as a Limited Liability Corporation (LLC) in August 2012, NewGen primarily serves public sector utilities and provides nationally recognized expertise in utility cost of service (COS) and rate design studies, financial feasibility studies, municipalization and privatization efforts, depreciation and appraisal studies, litigation support for state and federal regulatory proceedings, utility financial planning, and stakeholder engagement for water, wastewater, solid waste, electric, and natural gas utilities.

UTILITY RATES ARE WHAT WE DO

NewGen's core business is providing financial and management advice related to electric, water, wastewater, stormwater, and solid waste utilities. The specialized services we offer to our clients include:

- Cost of Service/Rate Studies
- System Development Charges/Capacity Fee Studies
- Operational Reviews/Management Audits
- Comparative Analyses/Benchmarking
- Expert Witness Testimony
- Financial Feasibility Studies
- Infrastructure Management/GASB 34
- Conservation Studies
- Appraisals / Fair Market Valuations
- Organizational Effectiveness

Understanding your community, your organization, and your data are the three essential elements to developing actionable strategies to sustain your future service. *NewGen believes that strategy dictates everything.* Our personnel have extensive experience in all financial and management facets of municipal utilities. The City is in a situation that many utilities have found themselves, and the right answers are difficult to know for certain. *Because of our strategic focus, we design our recommendations to ensure they are responsive, transparent, and reliable while paving the way for successful buy-in across all your stakeholders.*

We are routinely engaged to perform multiple studies or provide additional services for our clients. This is an indication of our client's satisfaction with our work product, as well as the trust and confidence placed in our capabilities, approaches, and recommendations.

NewGen has worked hard over the years to attract and maintain a diversified staff of professionals with exceptional skills, dedication, and talent. We have built our reputation by providing clients with solutions that are based on sound principles, economic feasibility, and innovative thinking without losing sight of budget and schedule constraints. We are proud of the long-standing relationships that we have developed with our clients.



C. EXECUTIVE SUMMARY

More than 90% of NewGen’s work is in the municipal utility market; we have worked for hundreds of public agencies, from Alaska to the Florida Keys, from Maine to southern California. With a professional staff of more than sixty in thirteen offices across the country, we have worked for clients in more than thirty states.

PROJECT TEAM AND SCOPE OF WORK

Our proposed project personnel are listed below:

Name	Project Role	Expertise	Years Experience
Eric Callocchia	Project Manager	Water/Sewer COS and Rate Design	15
Richard Campbell	QA/QC	Utility Financial Management	30+
Zachary Wright	Capital Asset Analysis / Financial Models	Asset Valuation / MS Excel	12
Tianna Carnes	Cost of Service and Rate Design	Water/Sewer COS/Rate Design	6
Aidan Oates	Data Analysis	Data Analysis and Organization	3
Alexandra Robinson	Study Support	Data Analysis and Organization	1

Each NewGen team member brings a unique and broad understanding of utility rates and financial management. Further information and brief resumes for each team member are included in Section D. Key Project Personnel.

Our proposed scope of work is comprised of the following tasks:

Task	Description	Level of Effort (Hours)
Task 1	Initial Meeting And Data Collection	72
Task 2	Projection Of Revenues Under Existing Rates	68
Task 3	Development Of Revenue Requirements And Cash Flow Analyses	92
Task 4	Evaluation Of Customer Classes	44
Task 5	Cost Of Service Allocations	60
Task 6	Design Rates And Charges	52
Task 7	Financial Planning And Rate Design Computer Model	88
Task 8	Deliverables	116
Task 9	Meetings And Presentations	128
Task 10	Additional Rate Study Services	72
Total Level of Effort		792

Our scope of work assumes a start date of January 1, 2025, and that our recommended rates would be effective July 1, 2026.

The study will result in legally defensible, cost-based water and sewer rates for the City’s utilities. Our financial models will be dynamic, linked to the real-world data, and adaptable to provide the City with tools to update forecasts as estimates become knowns and forecasts become reality.

D. KEY PROJECT PERSONNEL

NewGen evaluates the needs of each project and assembles a Project Team of knowledgeable professionals who are uniquely qualified to provide the needed services. The project team assembled for this engagement includes widely recognized experts in utility cost of service, ratemaking, and Proposition 218 compliance. They each possess unique knowledge of regulatory requirements and industry trends as well as best practices to develop water and sewer rates which balance the goals and objectives of the City.

The following are brief biographies of our proposed project team. Detailed resumes are included as Appendix A to this proposal.

ERIC CALLOCCHIA | PROJECT MANAGER



EDUCATION: BA, Economics/Mathematics, Johns Hopkins University

AFFILIATIONS: AWWA, WEF, CWEA, GFOA

AWWA National Rates and Charges Committee - Cost of Service Subcommittee

PUBLICATIONS: Contributing author, WEF Manual of Practice (MOP) 27 – *Financing and Charges for Wastewater Systems*; AWWA Manual M1 – *Principles of Water Rates, Fees and Charges*

Eric Callocchia has over fourteen years of water and sewer utility cost of service and financial consulting experience. His expertise involves a broad range of industry issues, including revenue stability, customer affordability, cost of service rate making, and public engagement and education. His expertise in utility cost of service is rooted in his exceptional analytic skills and broad experience, both of which ensure that the recommendations he develops are understandable and withstand legal scrutiny.

He is involved in water and wastewater industry associations and is a contributing author to the most recent edition of the *Water Environment Federation's Manual of Practice 27 – Financing and Charges for Wastewater Systems*. He is an active member of the American Water Works Association (AWWA) Rates and Charges Committee, and a contributing author to the upcoming eighth edition of *AWWA's Manual M1 – Principles of Water Rates, Fees and Charges*. He is an accredited expert witness concerning utility rate setting matters and has provided expert advice in California related to one of the State's major rate litigation disputes (SDCWA v. Metropolitan, et al.).

Mr. Callocchia has worked with over 100 water, wastewater, and stormwater utilities throughout the United States. Through his efforts, clients have justified revenue increases, adopted cost allocation plans, implemented rate structure changes, enhanced reserve policies, funded capital financing plans, and applied other industry best practices. Mr. Callocchia regularly presents at industry conferences to keep peers informed of the cutting-edge methodologies developed as a part of his projects.

Mr. Callocchia will be the Project Manager for each COSS. He will be responsible for the day-to-day communication between NewGen and CWA and CSD staff, the overall progress of each COSS, and the delivery of NewGen's results and recommendations to the City Council and at any other public meetings.

D. KEY PROJECT PERSONNEL

RICHARD CAMPBELL | QA/QC



EDUCATION: Bachelor of Science, Electrical Engineering, University of Central Florida
United States Naval Nuclear Power Program

AFFILIATIONS: AWWA, National Rates and Charges Committee, Finance, Accounting and Management Committee

Mr. Richard Campbell has 35 years of experience in the industry, previously serving as the Financial Services Director of Freese and Nichols. He has led several complex projects associated with electric, natural gas and water/wastewater utilities. Mr. Campbell is an expert in a full range of utility finance issues including debt issuance support (revenue bond feasibility); valuation studies for acquisitions and mergers; alternative capital financing analyses; economic feasibility studies; wholesale and retail ratemaking/cost of service; impact fee/system development fee analysis; asset planning and asset management; development of renewal and replacement programs; and strategic and business planning.

Mr. Campbell's role on the project will be overall quality assurance and quality control. Given his deep industry experience, his insight into key issues will ensure that the results of each COSS are firmly established in sound industry practices.

ZAK WRIGHT | CAPITAL COST ANALYSIS & FINANCIAL MODELING



EDUCATION: Master of Business Administration, Belmont University;

Bachelor of Business Administration in Finance, University of Tennessee Knoxville

REGISTRATIONS AND CERTIFICATIONS: Accredited Senior Appraiser (ASA) by the American Society of Appraisers

AFFILIATIONS: Tennessee GFOA; American Society of Appraisers - Middle Tennessee Chapter Treasurer/Secretary; Society of Depreciation Professionals

Mr. Zak Wright has worked at NewGen for six years and previously worked in the banking and telecommunications industries. Zak assists with appraisals, financial planning, and rate analysis. Zak has experience in underwriting, banking, corporate finance, pro forma financial analysis, financial modeling, and strategic and capital planning. Before joining NewGen, he worked as a Commercial Credit Analyst.

In addition to being an Accredited Senior Appraiser, Mr. Wright is an expert at building custom advanced financial models. Mr. Wright will conduct the Capital Asset Replacement Analysis (Task 3.2) and lead the development of NewGen's dynamic financial models (Task 7).

D. KEY PROJECT PERSONNEL

TIA CARNES | COST OF SERVICE AND RATE DESIGN



EDUCATION: Master of Business Administration, Belmont University;
Bachelor of Science in Bible/Biblical Studies, Cairn University

Ms. Tia Carnes joined the firm as a Consultant in February 2020. During her tenure, she has provided financial modeling, appraisal/valuation support, cost of service and rate design analyses, and most notably, support to the organizational review and workshop development projects. Her experience includes leadership training and development, team assessment, and financial analysis. Ms. Carnes came to NewGen with a strong background in customer service, logistics, and high-volume task management.

Ms. Carnes will be responsible for conducting the Cost-of-Service analysis for each COSS and developing the water and sewer rate designs. Ms. Carnes has performed water, sewer, replenishment, and irrigation cost of service and rate studies in California and knows how to develop Proposition 218 compliant rates.

AIDAN OATES | DATA ANALYST



EDUCATION: Master of Energy Management, Tulane University
Bachelor of Arts in English Literature and Finance, The College of William and Mary

Mr. Aidan Oates joined NewGen in 2021. He provides financial modeling, cost of service and rate design for water, wastewater, solid waste, and energy projects. His experience includes valuation, trading, economics, and investment banking specific to the Energy industry. He earned his BA in English Literature and Finance from William and Mary and a Masters in Energy Management from Tulane University.

Mr. Oates will be responsible for the collection, organization, understanding, and input of the data provided to NewGen to facilitate building NewGen's custom financial models.

ALEX ROBINSON | DATA ANALYST



EDUCATION: Bachelor of Arts in Political Science & Economics, Johns Hopkins University

Ms. Alex Robinson joined NewGen as a full-time Consultant in November 2023. She assists on cost of service and rate design projects, performing data evaluations and applying her financial modeling skills. Ms. Robinson's experience also includes economic analysis and affordability evaluations.

Ms. Robinson will be responsible for supporting Mr. Oates and Ms. Carnes with their tasks, preparing meeting minutes, and coordinating on study tasks with Mr. Callocchia on an ongoing basis.

E. UNDERSTANDING OF PROJECT

The City of Coachella, California (City), is located in Riverside County, within the Coachella Valley of California's Colorado Desert. The city hosts a population of roughly 42,000 people, spread over an area of 30.08 square miles. The Coachella Water Authority (CWA) and Sanitation Division (CSD) are municipal utilities serving the City's water and wastewater needs. The service area is roughly 32 square miles and serves approximately 9,000 customers (both residential and commercial). The City owns and operates 6 wells which provide groundwater as a principal source of water supply.

As set forth in the City's Request for Proposals, the CWA and CSD are seeking a consultant to assist in the preparation of a Comprehensive Rate Study for both CWA and CSD that ensure that the City's water and sewer utilities have sufficient and defensible funding to meet their operational, capital, and current debt obligations. In addition, the Studies shall result in rates that are proportionate to the cost of providing service to each customer class. What this means is that the City needs two Studies that result in defensible rate structures firmly established in data analysis, clear communication strategies to engage customers, and modeling tools adaptable to various operating and capital scenarios. *NewGen's approach to delivering these solutions in compliance with Proposition 218 is second to none.*

NEWGEN'S APPROACH TO SCOPE OF SERVICES

The City details a thorough scope of services in its RFP that generally aligns with an industry standard Cost of Service Study (COSS). The following section of our proposal details the specific way we will complete the various tasks identified by the City in its RFP.

Please note that the general approach to a COSS is nearly identical for a water and wastewater utility, and as the City's RFP requires that each Study be included in the proposal as a separate scope of work item, our proposal will note whether each task or subtask will be performed for the Water COSS, the Sewer COSS, or both. Most tasks apply to both Studies.

TASK 1 – INITIAL MEETING AND DATA COLLECTION (WATER AND SEWER COSS)

Task 1 relates to NewGen's collection, organization, understanding, and communication regarding the City's data.

1.1 – DATA REQUEST

Immediately upon receipt of notice to proceed, NewGen will deliver to the City a detailed request for information, identifying the data that is needed to perform the COSS. The nature of this data will be financial, operational, customer account and usage, asset records, and relevant ordinances.

A key part of this task is our team's coordination with the City's staff to ensure that our recommendations are possible to achieve within the City's current billing system.

E. UNDERSTANDING OF PROJECT

The success of the COSS is dependent on our understanding of your data. NewGen’s unique experience in data analysis sets us apart from other who offer a “one size fits all” approach. We know what to ask for to get you the answers you need.

NewGen will compile all the data relied upon to develop our recommendations in an Administrative Record that will be included in NewGen’s final deliverables. This is essential to maintain the defensibility of our Study’s recommendations.

1.2 – DATA COMPILATION

For both studies to be successful, it is essential that NewGen’s understands and organizes the City’s customer and usage data. Regarding customer account and usage data, NewGen will:

- Perform a reconciliation of the data provided with a goal to re-calculate Utility Service Revenue within our models for both CWA and CSD with a margin of error less than 2.0%.
- Identify any missing account information from the list of Master Meter accounts, including a sub-account and sub-sub-account analysis to ensure that each COSS is capturing all customer and usage information.
- Removing inactive account information to ensure future demand forecasts are not overestimating customer activity.
- Cleaning up customer data to ensure a clear relationship between the data provided and the data supporting each model’s forecasts.

The result will be clean sets of data that can be imported into NewGen’s financial models.

1.3 – PROJECT PLANNING

NewGen will schedule a project kickoff meeting with all key CWA, CSD, and NewGen personnel. The purpose of this meeting is to review and validate the scope of work, introduce key study personnel, identify any roadblocks to timely completion, agree to key dates, provide City personnel with contact information for all members of the NewGen team.

Based on our experience in working with municipal governments, *it is vitally important to identify and evaluate the key policy issues early in the study to ensure that consensus is developed regarding the principles that will govern the study.* Within one week after the meeting, NewGen will provide Meeting Minutes to the City memorializing the meetings discussion, decisions, and expected actions.

1.4 – REVIEW AND EVALUATION OF BASIC DATA

As the City furnishes the requested data, NewGen will load all files into an online Microsoft SharePoint® site with secure access enabled for only NewGen and City project personnel. We will review all the requested information to ensure that we have a complete understanding of the City’s utility operations.

NewGen will compile all the data relied upon to develop our recommendations in an Administrative Record that will be included in NewGen’s final deliverables. This is essential to maintain the defensibility of our Study’s results.

E. UNDERSTANDING OF PROJECT

1.5 – SUPPLEMENTAL DATA REQUESTS

If additional information is required to complete the Study, NewGen will submit formal requests for such data. Again, this is an effort to memorialize the data supporting our results to maintain the defensibility of our recommendations.

TASK DELIVERABLES

- Initial Request for Information.
- Shared project database to facilitate the preservation of the study's Administrative Record.
- Validation of study data.
- On-site kickoff meeting with NewGen staff and associated material.
- Supplemental data requests, if necessary.

TASK 2 – PROJECTION OF REVENUES UNDER EXISTING RATES (WATER AND SEWER COSS)

Forecasting revenue under existing rates provides the basis for NewGen’s recommended revenue increase needs. Therefore, Task 2 will determine the financial reality of both CWA and CSD if rates are not adjusted from existing levels for the period FY 2027 through FY 2031.

2.1 – CUSTOMER ACCOUNT AND VOLUME PROJECTIONS

The study’s demand forecast will be based on historical usage data and discussions with the City as to projected water demand. A key variable that NewGen will develop is the rate of change in the City’s customer base, including the numbers and types of new customers to be added year-by-year as well as increases (or decreases) in water on a per capita basis.

2.2 – PROJECTION OF REVENUES UNDER EXISTING RATES

Given the results of Task 1.2 (Data Compilation) and 2.1 (Customer Account and Volume Projections), NewGen will develop reasonable and data-based forecasts of CWA and CSD Utility Service Revenue under the existing effective water and sewer rates structures. This will provide a baseline to which NewGen can compare the net revenue required from rates each year, thus facilitating NewGen’s development of recommended rate revenue increase needs.

2.3 – PROJECT OTHER INCOME

NewGen will include reasonable projections of CWA and CSD revenues other than Utility Service Revenue. This will include an understanding of the issues impacting the future of Property Tax revenues (Secured and Unsecured), interest income, groundwater replenishment, and other revenue sources.

TASK DELIVERABLES

- Forecast of water and sewer customer accounts and usage for the period 2026 – 2031 based on historical data and reasonable estimations of future conditions.
- Forecast of CWA and CSD Utility Service Revenue under existing rates for the period 2026 – 2031.
- Forecast of other CWA and CSD revenues to provide a complete future picture of revenues to support ongoing operating, capital, and reserve requirement costs.

E. UNDERSTANDING OF PROJECT

TASK 3 – DEVELOPMENT OF REVENUE REQUIREMENTS AND CASH FLOW ANALYSES (WATER AND SEWER COSS)

The sum of the O&M costs, annualized capital costs (debt service plus cash purchases of capital assets) and any contributions to reserves is called the revenue requirement – the amount of money that must be raised from all revenue sources in a given year. The forecasted revenue requirements for the City's water and sewer systems will determine NewGen's revenue adjustments recommendations.

NewGen will develop a detailed analysis for both CWA and CSD to justify the need for future revenues. The justification of forecasted costs sets the foundation for recommended rates and Proposition 218 compliance.



3.1 – PROJECT OPERATION AND MAINTENANCE EXPENSE

NewGen will complete a trend analysis of the City's historical expenses and demands to inform our evaluation of appropriate classification of costs and customer classes. Using the City's most recently adopted operating budget as a starting point, we will review the adequacy of budgeted operating and maintenance costs. O&M expenses will be forecasted based on estimated annual inflation rates at the budgetary account line-item level. The forecast of operating expenditures will be based on:

- Review of historical operating expenditure increases by individual budget account line item.
- Any changes in operations and staffing, such as additional FTEs or chemical costs.
- Identifying and assessing the impact of the current capital improvement program on operating expenditures, such as new treatment technology.
- Estimation of impacts of more strict regulatory burdens on the City that may materialize within the study period.

3.2 – ROUTINE CAPITAL EXPENDITURES

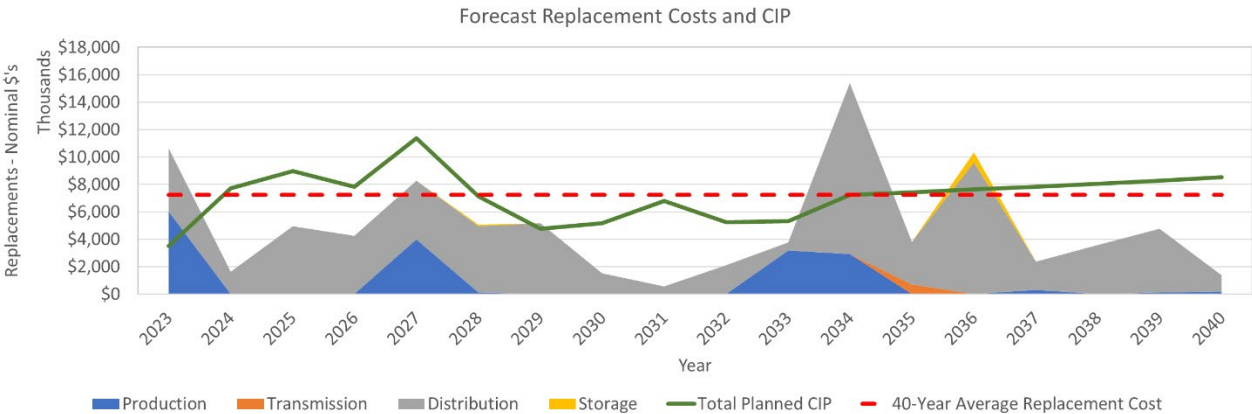
Water and sewer utilities are facing increased challenges when trying to keep up with the rising cost of asset repair and rehabilitation. It is essential that the City make the necessary routine investments in its water and sewer assets – the question is, how can the City determine the proper asset replacement funding levels?

If the City desires to justify an increase in spending to fund routine capital expenditures, then it needs a sound, data-driven solution to quantify the real-world value of its assets now and in the future. NewGen's unique valuation and appraisal expertise will provide the City with the confirmation necessary to ensure proper routine capital funding and Proposition 218 compliance.

To support our recommendations, NewGen will perform a capital asset depreciation funding analysis, a sample of which is shown in Exhibit 1.

E. UNDERSTANDING OF PROJECT

Exhibit 1. Capital Asset Replacement Analysis



The analysis above shows whether planned investment (green line) is sufficient to fund asset replacement based on asset depreciation by type (colored areas, averaged to the dotted red line). Although there are peaks and valleys demonstrate the end of asset useful lives based on asset depreciation schedules, on average, the green line should be above the dotted red line. This demonstrates that planned asset re-investment is keeping pace with asset depreciation on average. NewGen will recommend, if necessary, a capital asset replacement plan that sufficiently meets the depreciation profile of the City's assets.

3.3 – MAJOR CAPITAL IMPROVEMENT PROGRAM FINANCING PLAN

NewGen will develop financing plans for the major capital improvement program. NewGen’s model will clearly show the name, funding source, cost, and timing of each major capital improvement project over the forecast period. A sample CIP input is shown as Exhibit 2 below.

Exhibit 2. Sample Capital Improvement Program Input

Project Description	PAYGO	WSBFC	Grants	New Debt	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Booster Station 07990 Rehabilitation and Upgrade	0%	0%	40%	60%	\$3,200,000				
Booster Station 07101 Rehabilitation and Upgrade	0%	0%	40%	60%	\$500,000	\$1,375,000			
Booster Station 07102 Rehabilitation and Upgrade	0%	0%	40%	60%	\$100,000	\$450,000	\$1,265,000		
Booster Station 05513 Rehabilitation and Upgrade	0%	0%	0%	100%	\$75,000	\$2,500,000	\$1,475,000		
Reservoir 4711-3 and 4711-4 Construction	0%	80%	20%	0%	\$2,500,000	\$3,100,000			
Reservoir 5514-2 Construction	0%	0%	0%	100%	\$50,000	\$2,000,000	\$1,000,000		
Reservoir 7101-2 Construction	0%	0%	35%	65%	\$2,000,000	\$1,700,000			
Reservoir 4730-2 Design and Construction	0%	75%	25%	0%	\$500,000	\$6,000,000	\$1,500,000		
Reservoir 7802-2 Design and Construction	0%	57%	43%	0%		\$500,000	\$5,000,000	\$500,000	
Reservoir 3601-1 Rehabilitation	100%	0%	0%	0%	\$150,000	\$1,500,000			
Reservoir 5513 Rehabilitation	100%	0%	0%	0%		\$150,000	\$1,500,000		
Reservoir 5514-1 Rehabilitation	100%	0%	0%	0%				\$100,000	\$975,000
Reservoir 7101-1 Rehabilitation	100%	0%	0%	0%				\$100,000	\$1,125,000
North Shore Water Main Replacements	0%	0%	0%	100%	\$100,000				
Dale Kiler Road Water Main Replacement	0%	0%	0%	100%	\$8,160,740				
Preliminary Design Highway 86 Main	0%	50%	50%	0%	\$340,000				
Highway 86 Main, Phase 3 Final Design and Construction	100%	0%	0%	0%		\$700,000	\$7,500,000	\$7,500,000	
Highway 86 Main, Phase 4 Final Design and Construction	100%	0%	0%	0%					
Avenue 66 Transmission Main and Lincoln Street	0%	0%	100%	0%	\$17,766,189				

The CIP input in NewGen’s models is adaptable and can instantly show the impact of project timing, costs, and funding source. NewGen will work with CWA and CSD staff to develop a financing plan that incorporates considerations for available funding, existing and forecasted revenue, bond ordinance covenants, impacts on water and sewer rates, impacts on customer affordability, and City policy.

E. UNDERSTANDING OF PROJECT

3.4 – DEBT SERVICE EXPENSE

NewGen will include the annual principal and interest payments for existing debt service related to the City's systems in the revenue requirement projections. NewGen will calculate principal and interest payment schedules for any projects funded with new debt in the CIP plan from Task 3.3 (Major Capital Improvement Program Financing Plan). The debt necessary to fund each project will be based on the project construction costs, issuance costs, and any reserve or requirements.

3.5 – RESERVE FUNDING

NewGen will review the City's reserve fund requirements and balances for adequacy given industry guidance. The American Water Works Association's (AWWA) Rates and Charges Committee states that "The level of reserves maintained by a utility is an important component of short and long-term financial management, and is a key consideration in the rate-setting process."¹ Other industry groups have published recommendations for minimum utility fund reserve levels, including the Water Environment Federation (one – three months O&M costs), the International City/County Management Association (one – two months of total expenses), and The Government Finance Officers Association (No less than 45 days of total expenses). A sample reserve recommendation table from a NewGen report is show below.

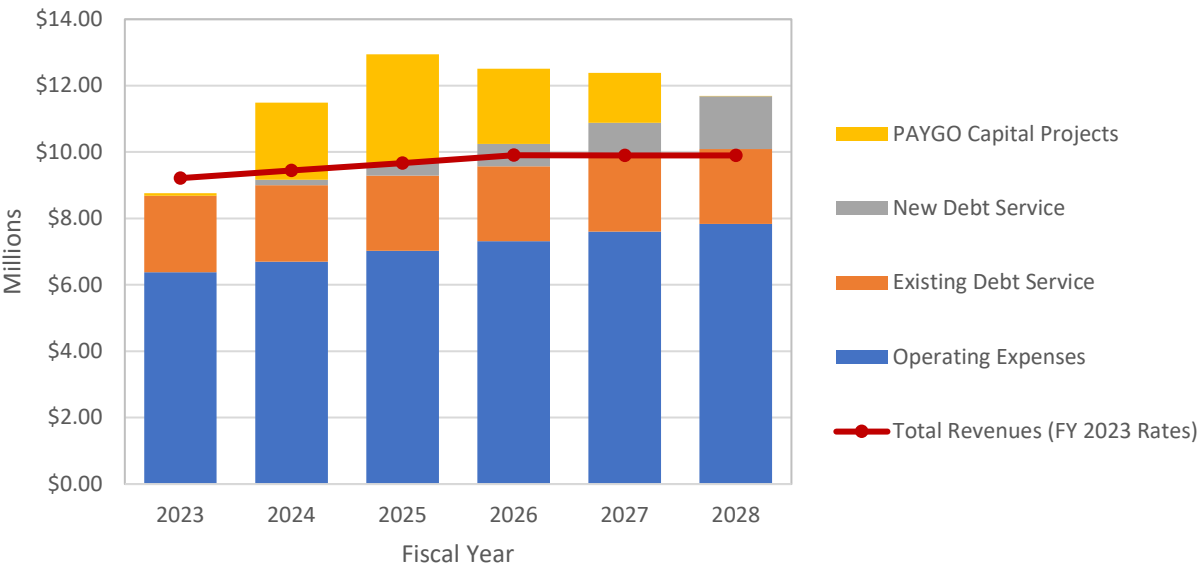
Minimum Reserve Balance Recommendation Comparison		
	Water	Sewer
WEF (30-90 Days O+M)	\$524,050 - \$1,572,151	\$114,963 - \$344,889
GFOA (45 Days Total Expenses)	\$1,080,345	\$285,767
ICMA (30-60 Days Total Expenses)	\$720,230 - \$1,440,460	\$190,511 - \$381,023
NewGen Recommended	\$599,282	\$148,719

3.6 – PROJECTED REVENUE ADJUSTMENT NEEDS

The previous tasks in this workplan will result in two key forecasts: the total annual revenue requirement of both the City's water and sewer systems, and the amount of annual rate revenue under the City's existing water and sewer rates. NewGen will compare the annual cash flow given these two forecasts and determine the need to increase water and sewer revenues given the minimum reserve requirements developed in Task 3.5. A sample revenue adjustment needs analysis is shown in Exhibit 3 below:

¹ AWWA Rates and Charges Committee Whitepaper, *Cash Reserve Policy Guidelines*, 2018

Exhibit 3. Sample Water Expenses vs. Revenues Forecast



In the above example, it is clear that the total revenues at the currently effective (FY 2023) rates are not sufficient to meet the total revenue requirement represented by the stacked bars. This kind of visual story telling helps communicate the study’s results to a non-technical audience.

3.7 – PREPARATION OF ALTERNATIVES FOR REVIEW BY THE CLIENT

NewGen will develop a minimum of four (4) financing plans each for CWA and CSD. Differences in the four forecasts may be the result of changes to forecasting assumptions such as increased/decreased demand, alternative capital financing plans, and/or changes in capital project timing/costs. Alternatively, the forecasts may share the same revenue requirements but may have modified phase-ins of revenue increases to meet cash flow needs over shorter or longer periods of time, while still maintaining compliance with all reserve policies.

As detailed later in our proposal, NewGen’s financial models do not need to be saved as different versions when comparing scenarios – each scenario can be saved in the same file and compared side-by-side in real time.

3.8 – TEST YEAR COST OF SERVICE

With our understanding of CWA and CSD’s operating, debt service, capital, and reserve requirements, we will develop a Test Year 2025 as the basis of our future projections. Future Test Years will be used to assign costs to rates throughout the FY 2026 – FY 2031 study forecast.

TASK DELIVERABLES

- Analysis of historical operating expenses.
- Forecast of reasonable future operating expenses.
- Recommendation for reserve replenishment program.
- Capital Asset Analysis and recommended routine capital replacement funding forecast.
- Funding plan for major capital improvement program.
- Debt service forecasts for existing and new debt service.

E. UNDERSTANDING OF PROJECT

- Ten-year forecasted Cash Basis revenue requirement.
- Up to four (4) alternative financing plans recognizing major capital financing needs and different revenue phase-in scenarios.
- Test Year cost of service for FY 2025 and future years to serve as the basis for cost of service allocations and recommended rates.

TASK 4 – EVALUATION OF CUSTOMER CLASSES (WATER AND SEWER COSS)

The underlying concept in this Task is the justification of charging different groups of water and/or sewer customers different fees based on justifiable allocations of system costs. This practice is commonly referred to as identifying customer classes. The practice of distinguishing between customer classes in water rate making is well established and proper when the classes impose different costs on the utility. According to the American Water Works Association (AWWA) Manual M1 – Principles of Water Rates, Fees, and Charges, 7th Edition (Manual M1), “service characteristics” can be considered when establishing customer classes. A common example for a water utility is the practice of identifying costs separately between classes of customers who demonstrate different demand patterns between their respective average and peak demands. A typical example for a sewer utility is identifying customers who contribute higher than normal, i.e., domestic, strength contaminants such as Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS). Our evaluation of CWA’s justification for its distinction between classes is rooted in these fundamental concepts.

The City’s current water rate structure does not distinguish between customer classes but does include an inclining block volumetric rate structure. If the City desires to adopt an alternative water rate structure with different rates for different customer classes, then NewGen’s analysis will provide the justification necessary for such rates.

4.1 – REVIEW CUSTOMER CLASSES

NewGen will evaluate the City’s current water and sewer customer classes and determine the equitability of such distinctions. NewGen will rely on industry standard concepts to make these determinations, which will be rooted in the data collected for the COSS. **It is important that this is not a results-based analysis. NewGen will demonstrate that fundamental customer characteristics define customer classes by grouping customers with similar demand characteristics and evaluating which customers end up in the resulting groups. NewGen will not simply determine the demand characteristics of predetermined groups of customers by class.**

4.2 – DETERMINE CUSTOMER CLASS CHARACTERISTICS

After the completion of Task 4.1 (Review Customer Classes) in which NewGen will either validate or recommend changes to CWA’s and/or CSD’s customer classes, NewGen will then determine the class characteristics that will underlie our cost-of-service determinations and ultimately our recommended rates. A sample summary of data-based customer characteristics is shown in Exhibit 4 below.

E. UNDERSTANDING OF PROJECT

Exhibit 4. Sample Water Class Characteristics Summary

January 2021 - December 2021	Average Day		Max Day (NCP)				Max Hour (NCP)				Customer (Monthly)	
Customer Classification	MGD	%	Peak Factor	MGD	Excess	%	Peak Factor	MGD	Excess	%	Connections	%
Residential	9.2	45.8%	1.47	13.54	4.31	40.7%	2.45	22.66	9.12	35.1%	80,373	85.5%
Residential Irrigation	0.7	3.3%	3.59	2.39	1.72	16.3%	16.69	11.10	8.71	33.5%	5,424	5.8%
Non-Residential	4.4	21.7%	1.21	5.29	0.92	8.7%	1.78	7.77	2.48	9.5%	6,775	7.2%
Non-Residential Irrigation	0.6	2.8%	2.62	1.49	0.92	8.7%	7.51	4.28	2.79	10.7%	1,434	1.5%
Large Users	2.2	11.0%	1.42	3.16	0.94	8.8%	2.05	4.56	1.41	5.4%	23	0.0%
Wholesale	3.1	15.4%	1.57	4.89	1.78	16.8%	2.05	6.37	1.48	5.7%	10	0.0%
Total	20.2			30.76	10.59			56.75	25.99		94,038	

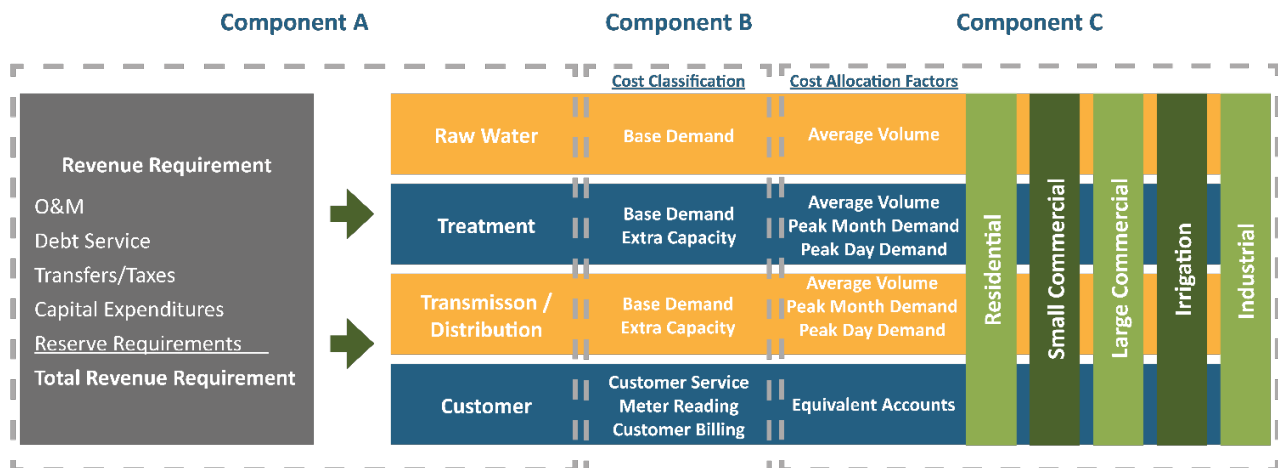
TASK 5 – COST OF SERVICE ALLOCATIONS (WATER AND SEWER COSS)

To complete the cost-of-service analysis, NewGen would follow the industry established methodology described in Manual M1 for identifying and allocating water system revenue requirements. NewGen's approach distributes the annual cost of providing service among customer types commensurate with customers' service characteristics. The cost-of-service analysis involves the following tasks:

1. **Functionalize** costs, which is the assignment of costs to the functions of the City's system. Examples of functions are supply, distribution, storage, meter servicing, and customer billing and collection.
2. **Allocate** functionalized costs to cost causation components of the City's service. Cost causation components for water service include base demand, maximum day demand, maximum hour demand, public fire protection (i.e., the cost to comply with statutory mandates to provide fire flows), and customer service and billing costs. Cost causation components for sewer service include flow, BOD, TSS and other constituents.
3. **Distribute** functionalized costs by causation components, using unit costs, to customer classes in proportion to their use of the systems, including fixed capacity (i.e., meter-size or potential instantaneous demand) and variable demand (i.e., volume of use).

In this manner, NewGen's methodology develops rates that reflect the proportional demand on the City's system by similar types of customers. This is the approach described in AWWA Manual M1 and reviewed in many California water ratemaking appellate decisions. A graphical representation of this process is shown in Exhibit 5.

Exhibit 5. Water Cost of Service Analysis Process

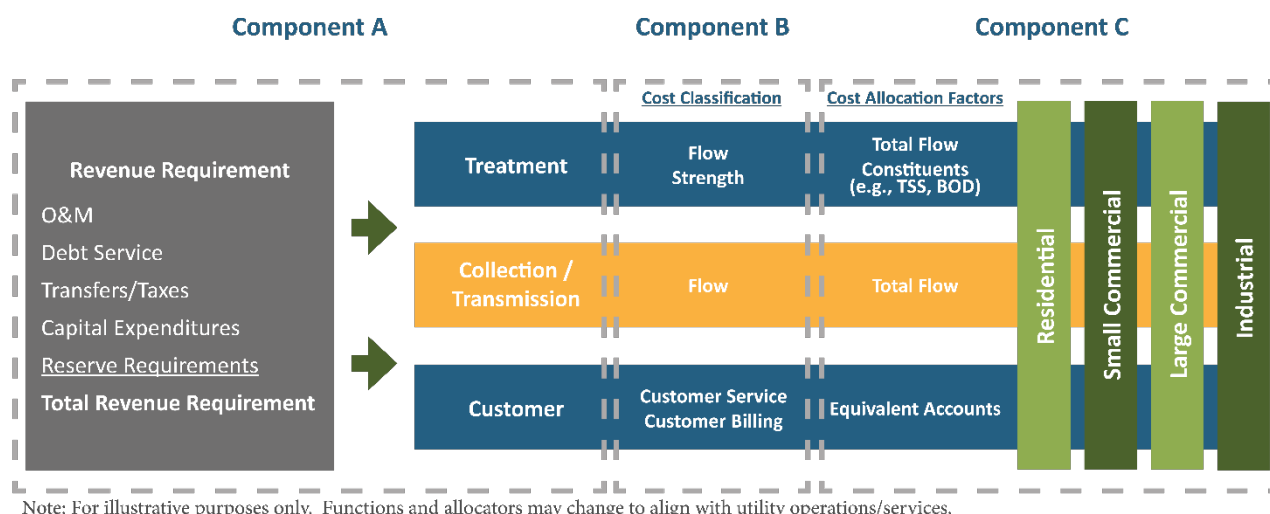


Note: For illustrative purposes only. Functions and allocators may change to align with utility operations/services.

E. UNDERSTANDING OF PROJECT

Sewer COS Analysis follows a similar methodology, with the defining system and class characteristics rooted in data related to flow and constituent strength, as shown in the following Exhibit.

Exhibit 6. Sewer Cost of Service Analysis Process



To complete the COS analysis, functionalization, allocation, and distribution factors must be developed for the systems as a whole and each customer class.

5.1 – CAPITAL COST ALLOCATIONS

NewGen will functionalize CWA and CSD's capital assets based on the Replace Cost New Less Depreciation (RCNLD). These functional amounts will be determined in a previous task, specifically Task 3.2 (Routine Capital Expenditures) as part of the capital depreciation analysis. A sample capital functionalization from a NewGen model is shown below as Exhibit 7.

Exhibit 7. Water Test Year Capital Cost Allocation (RCNLD)

Allocation of Functionalized Assets (RCNLD)	Test Year	% Allocation
Pumping	\$ 39,382,198	3.3%
Treatment	24,678,056	2.1%
Storage	114,461,700	9.5%
Transmission	753,277,776	62.8%
Customer Service	-	0.0%
Billing	-	0.0%
Meter Costs	98,627,884	8.2%
Source of Supply	152,230,817	12.7%
Replenishment	-	0.0%
Backflow	13,327,629	1.1%
Conservation	-	0.0%
Fire Protection	4,177,768	0.3%
Resulting Allocation	\$ 1,200,163,828	100%

E. UNDERSTANDING OF PROJECT

5.2 – FUNCTIONAL COST ALLOCATIONS

The functional cost allocations developed for operating costs (OPEX) and capital costs (CAPEX) will be based on Test Year revenue requirement data and asset data on a RCNLD basis. NewGen will work with CWA and CSD staff to determine appropriate functional cost allocations tied to operating activities within the Test Year revenue requirement. A sample water functional cost allocation from a recent NewGen report is presented in the table below.

Functionalization of FY 2026 Test Year Expenses

	Allocation of OPEX	Allocation of CAPEX
Pumping	7.4%	3.3%
Treatment	3.3%	2.1%
Storage	3.4%	9.5%
Transmission	15.2%	62.8%
Customer Service	6.8%	0.0%
Billing	8.5%	0.0%
Meter Costs	4.0%	8.2%
Source of Supply	23.6%	12.7%
Replenishment	17.8%	0.0%
Backflow	1.6%	1.1%
Conservation	6.0%	0.0%
Fire Protection	2.4%	0.3%
Total ⁽¹⁾	100.0%	100.0%

(1) Functionalization process to arrive at these allocations found in Appendix B – Functionalization.

5.3 – DEVELOPMENT OF CUSTOMER CLASS UNITS OF SERVICE

Customer class units of service serve as the basis for the allocation of costs to customers based on service characteristics. Based on NewGen’s recommendations resulting from Task 4 (Evaluation of Customer Classes), we will develop units of service for each class that align with the industry standard Base/Extra Capacity method (water) and flow/strength method (sewer).

5.4 – ALLOCATION OF COSTS TO CUSTOMER CLASSES

Functional costs are allocated to system demand components on a cost causation basis (i.e., Base, Max Day, Mx Hour, etc.), and customer demands are developed on the same basis. The result is the intersection of cost and demand on system cost causative components, directly assigning appropriate system costs to customer classes. A sample customer cost allocation from a NewGen water rate study is shown in Exhibit 8 below.

E. UNDERSTANDING OF PROJECT

Exhibit 8. Sample Allocation of Costs to Customer Classes (Water COS)

Customer Classification (Retail Only)	Total	Base	Max Day	Max Hour	Customer
Residential	\$ 26,931,203	\$ 14,786,152	\$ 5,465,360	\$ 3,491,045	\$ 3,188,646
Residential Irrigation	6,797,573	1,065,422	2,180,756	3,336,223	215,171
Non-Residential	9,389,740	7,004,877	1,165,887	950,196	268,780
Non-Residential Irrigation	3,208,648	914,147	1,168,447	1,069,152	56,901
Large Users	5,283,556	3,558,023	1,185,804	538,827	903
Wholesale	5,585,824	3,865,741	1,719,686	-	397
Total Customer Classification (Retail Only)	\$ 57,196,543	\$ 31,194,361	\$ 12,885,941	\$ 9,385,444	\$ 3,730,797
	100.0%	54.5%	22.5%	16.4%	6.5%

5.5 – DETERMINATION OF REVENUE ADEQUACY

The sum of the cost by causative component by customer class provides the basis for rates by customer class, which may increase or decrease revenues on a class basis. The following exhibit shows the ultimate cost of service allocation to customer classes of a recent NewGen water COSS:

Exhibit 9. Sample Determination of Revenue Adequacy (Water COS)

Revenue Comparison	Cost of Service	Projected Revenues	Variance (\$)	Required Rate Change
Residential	\$ 26,931,203	\$ 33,874,052	\$ 6,942,849	-20.5%
Residential Irrigation	6,797,573	4,284,690	(2,512,883)	58.6%
Non-Residential	9,389,740	9,545,275	155,536	-1.6%
Non-Residential Irrigation	3,208,648	2,105,285	(1,103,363)	52.4%
Large Users	5,283,556	3,431,814	(1,851,742)	54.0%
Wholesale	5,585,824	4,377,884	(1,207,939)	27.6%
Total Revenues	\$ 57,196,543	\$ 57,619,001	\$ 422,458	-0.7%

In the above example, while system wide revenues are sufficient to meet the system cost of service, it is clear that the Residential class is significantly under collecting at the current rates. To align rates with the cost of service analysis, this utility would likely gradually increase Residential rates at a faster pace than other rate classes as to not create rate shock but move the Residential class towards its allocated cost of service.

TASK DELIVERABLES

- Industry standard COSS based on AWWA M1 methodology.
- Development of Capital Cost Allocations
- Development of Functional Cost Allocations
- Development of Customer Class Units of Service
- Allocations of Costs to Customer Classes
- Demonstration of Revenue Sufficiency by class.

TASK 6 – DESIGN RATES AND CHARGES (WATER AND SEWER COSS)

The results of Task 5 will be the assignment of Test Year costs to the City's water and sewer customers, whether in total (if the City does not determine water customer classes to be desirable) or by class. There are many rate designs that can generate appropriate class revenue – the key to Task 6 is aligning recommended rates with the cost components developed in Task 5.

E. UNDERSTANDING OF PROJECT

CALIFORNIA CONSTITUTION ARTICLE XIII D, SECTION 6 (PROPOSITION 218)

Proposition 218, a portion of which is set out in the California Constitution as Article XIII D, was enacted in 1996 to ensure that public agency utility service rates, fees, and charges are reasonable and proportional to the cost of providing the applicable services. The principal requirements for application of such rates, fees, and charges, as they relate to public water service, are as follows:

- A property-related rate/fee/charge imposed by a public agency on a parcel shall not exceed the costs required to provide the property-related service.
- Revenues derived by the rate/fee/charge shall not be used for any purpose other than that for which it was imposed.
- The amount of the rate/fee/charge imposed upon any parcel shall not exceed the proportional cost of service attributable to the parcel.
- Rates must reflect services immediately available to a fee payer.
- Rates may not fund general governmental services, like police and fire services.

Manual M1 states that water rates and charges should be recovered from types of customers in proportion to the cost of serving those customers. Proposition 218 requires that water rates/fees/charges be reasonable, meaning that the rate-setting methodology must be sound and that there must be a nexus between the costs and the rates charged. NewGen follows industry standard cost of service process rate-setting methodologies set forth by Manual M1, adhering to Proposition 218 requirements when developing tiered water rates to ensure that they do not exceed the proportionate cost of providing the corresponding services.

Specifically, in the San Juan Capistrano case, the court stated that any rates, including tiered rates, must “correspond to the actual cost of providing service at a given level of usage.” Furthermore, the court stated:

“And, we emphasize, there is nothing at all in [California Constitution Article XIII D, section 6,] subdivision (b)(3) or elsewhere in Proposition 218 that prevents water agencies from passing on the incrementally higher costs of expensive water to incrementally higher users. That would seem like a good idea. But subdivision (b)(3) does require they figure out the true cost of water, not simply draw lines based on water budgets... . Our courts have made it clear they interpret the Constitution to allow tiered pricing; but the voters have made it clear they want it done in a particular way.”

This statement from the court outlines several fundamental principles for a properly conducted rate analysis:

- Rates must be based on the cost of providing water service.
- Tiered pricing is an acceptable methodology under Proposition 218.
- Increasing block rates that pass incrementally higher costs of expensive water onto incrementally higher demand users is an acceptable methodology of proportionately allocating the costs of service under Proposition 218.

While NewGen’s COSS methodology should not be considered legal guidance, as it does not offer any assurances of compliance with any other state, federal, or other laws, our approach is informed by the best available legal guidance and strives to match that guidance.

E. UNDERSTANDING OF PROJECT

The City should understand that given the recent California Court of Appeals decision in *Coziahr V. Otay Water District (Otay)*, its practice of having a different sewer rate structure for Residential customers and flat rate structures for Non-Residential customers poses a significant legal risk.

In *Otay*, the trial court determined that, in the “same flaw” as in *Palmdale*², *Otay* “discriminated against [SFR] customers” by charging them more for water by tier “than other classes of customers . who are charged a flat rate.” The Court of Appeals agreed. While there are many other issues discussed in the Court of Appeals decision and the City’s sewer rate structure does not exactly match that of *Otay*, the key issue is relevant the City given that its rate structure has different charges for Residential and Non-Residential sewer customers.

Our approach to reviewing and evaluating municipal utility rates is governed by the view that the ideal rate structure must endeavor to satisfy eight principles:

1. *Understandable* means that customers must be able to understand how their use of each service impacts their bills.
2. *Transparency* is a prime consideration because rates must be shown to comply with applicable local, state, and federal statutes, particularly Proposition 218.
3. *Recover Costs* recognizes that rates are cost-driven.
4. *Financial Stability* means that the utility must meet all reserve policies and bond covenants while maintaining cash flow.
5. *Rate Stability* means rates should be kept low over time, not merely keep them low for the short term.
6. *Fairness* requires that rates and charges result in no undue discrimination among customers.
7. *Avoid Subsidies* recognizes that while there are justifiable differences in cost allocations, rates should not purposely shift cost burdens between customer classes.
8. *Economically Efficient* refers to the ability of the rate schedule to encourage wise use of the resources.



Some of these criteria are in competition with others, and not all can be achieved to a maximum extent simultaneously. Rate structures must be tailored to community perceptions, realities, and values.

² City of Palmdale v. Palmdale Water Dist. (2011) 198 Cal.App.4th 926

E. UNDERSTANDING OF PROJECT

6.1 – EXISTING RATE STRUCTURE EVALUATION

NewGen will evaluate the appropriateness of the current rate structures and opine on the advantages and disadvantages of each. Our evaluation will be informed by the principles discussed previously. No rate structure will perfectly align with the City's various objectives – NewGen will discuss with the City any ranking or priority of rate structure consequences.

6.2 – EXISTING TIER STRUCTURE EVALUATION (WATER COSS)

While each customer will contribute differently to system wide demand at any given time, the City's water tier structure must reflect a reasonable basis to assign costs due to the link between system minimum, average, and maximum (daily and hourly) demands to the costs it incurs to meet those demands. As per Manual M1, "Properly designed increasing block rates recover *class-specific cost of service* while sending a more conservation-oriented price signal to that class." (*Manual M1 at p. 123, emphasis added*). Manual M1 goes on to state further:

"Because a system must be constructed to meet maximum-day and maximum-hour demands, system capacity is underutilized during non-peak periods. Moreover, if the system were sized to meet the average demand only, the resource and infrastructure demands could be much smaller. Consequently, an increasing block structure may be designed to recover the cost of constructing and maintaining extra capacity for the peak demands. Because this capacity is underutilized, the per-unit cost of water is higher than for base capacity, which is used year-round. In short, a block structure can remain consistent with, if not enhance, the relationship of rates to cost of service" Manual M1 at p. 124, emphasis added.

NewGen's cost of service methodology detailed will demonstrate tier cutoffs that reflect, as Manual M1 states, a reasonable relationship between each tier and the CWA's system-wide demand profile.

6.3 – PROPOSED RATES

NewGen will develop proposed cost-based rates that align with the cost-of-service analysis for both water and sewer customers and, to the greatest extent possible, align with the City's preferences relative to the evaluation criteria presented earlier in our proposal. The proposed rates will be built from the "ground up" from the cost-of-service allocations. A sample rate design is presented below from a recent NewGen report.

FY 2026 Tiered Rate Calculation

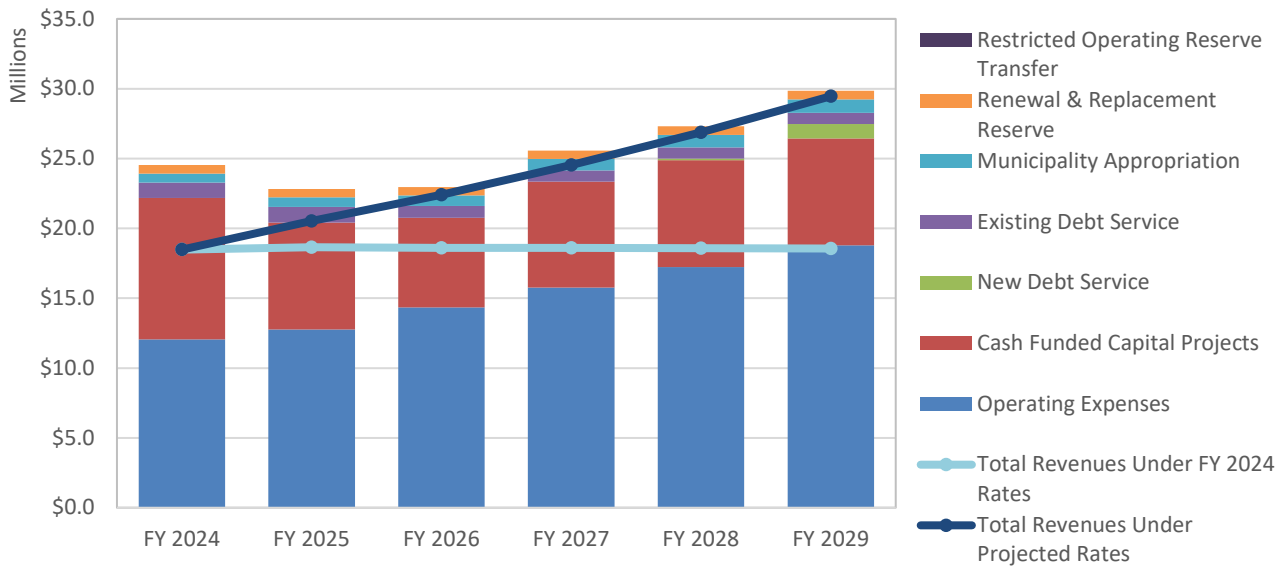
Tier	Base	Max Day	Max Hour	Conservation	COS Rate
Tier 1	\$0.89	\$0.40	\$0.00	\$0.00	\$1.29
Tier 2	\$0.89	\$0.72	\$0.00	\$0.00	\$1.61
Tier 3	\$0.89	\$1.09	\$2.32	\$0.58	\$4.88
Tier 4	\$0.89	\$1.32	\$2.80	\$0.70	\$5.72
Tier 5	\$0.89	\$2.15	\$4.56	\$1.14	\$8.73

6.4 – PROPOSED RATES REVENUE ADEQUACY

NewGen will demonstrate the revenue sufficiency of the proposed water and sewer rates. Because rates will have been developed by allocations of Test Year revenue requirements, they will be sufficient to fund the operating, capital, and reserve requirements of the systems. A sample visualization of this recommendation is provided below in Exhibit 10.

E. UNDERSTANDING OF PROJECT

Exhibit 10. Sample Expense vs. Revenue Forecast at Proposed Rates



As stated preciously, charts like the one above help clearly communicate the need for additional revenues to fund system costs. These charts are embedded in our financial models and update in real time as inputs and assumptions change.

6.5 – TYPICAL BILL COMPARISON

Under each proposed rate scenario, NewGen will compile sample bills for typical customers in each class. A sample bill forecast is shown below.

E. UNDERSTANDING OF PROJECT**Customer Bill Impacts – Alternative #2 (Recommended)**

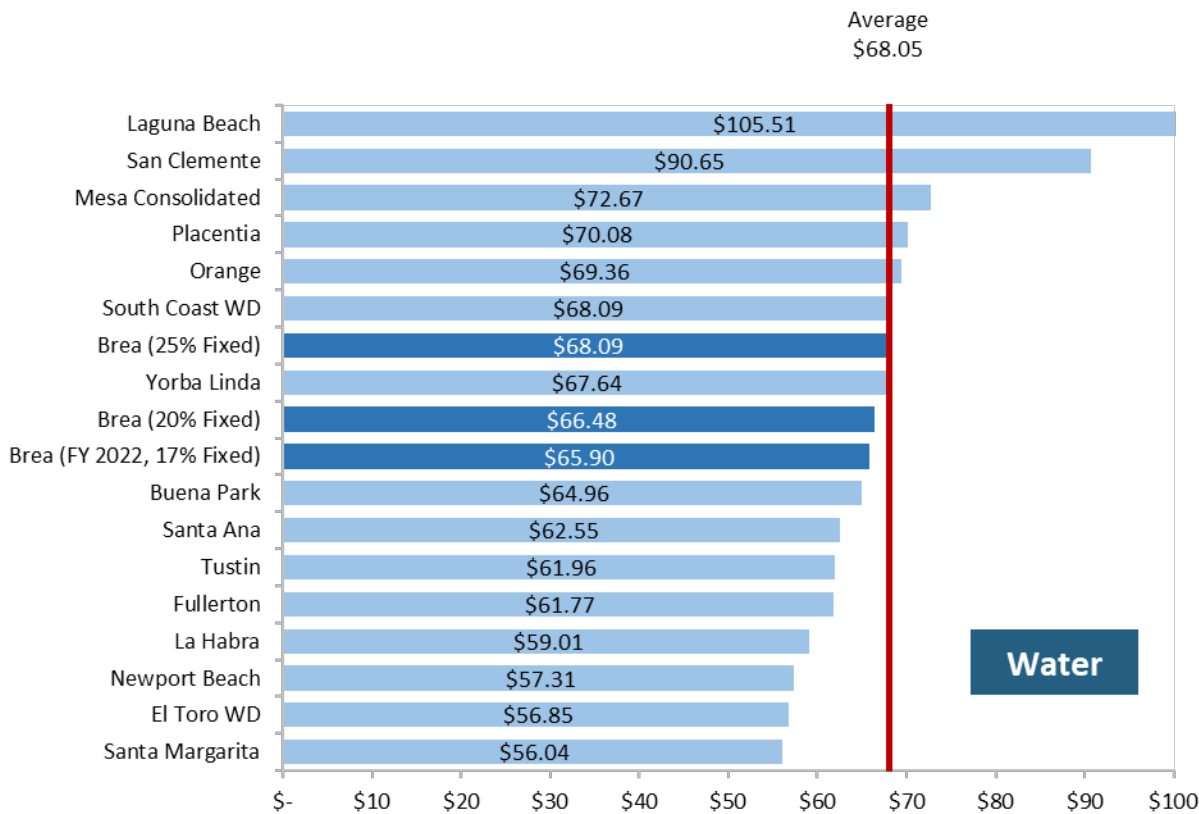
	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Residential						
Water Bill	\$53.25	\$57.09	\$59.08	\$61.15	\$63.29	\$65.51
Sewer Bill	\$42.80	\$53.20	\$57.46	\$60.90	\$63.34	\$65.56
Total Bi-Monthly Bill	\$96.05	\$110.29	\$116.54	\$122.06	\$126.63	\$131.06
\$ Change		\$14.24	\$6.25	\$5.52	\$4.58	\$4.43
% Change		14.8%	5.7%	4.7%	3.7%	3.5%
Commercial						
Water Bill	\$149.25	\$193.78	\$200.56	\$207.58	\$214.84	\$222.36
Sewer Bill	\$35.36	\$43.95	\$47.47	\$50.32	\$52.33	\$54.16
Total Bi-Monthly Bill	\$184.61	\$237.73	\$248.03	\$257.90	\$267.17	\$276.52
\$ Change		\$53.12	\$10.30	\$9.87	\$9.28	\$9.35
% Change		28.8%	4.3%	4.0%	3.6%	3.5%
Industrial						
Water Bill	\$209.65	\$380.31	\$393.62	\$407.40	\$421.66	\$436.41
Sewer Bill	\$295.39	\$367.17	\$396.54	\$420.33	\$437.15	\$452.45
Total Bi-Monthly Bill	\$505.04	\$747.48	\$790.16	\$827.73	\$858.80	\$888.86
\$ Change		\$242.44	\$42.68	\$37.57	\$31.07	\$30.06
% Change		48.0%	5.7%	4.8%	3.8%	3.5%

REGIONAL AGENCY BILL AND RATE COMPARISON

NewGen will compare the City's current and proposed water and sewer bill for a typical customer of each to a similar customer in surrounding utilities of similar size. A sample chart representing this comparison is shown below. NewGen provided this information to the City of Brea as part of a water rate study.

E. UNDERSTANDING OF PROJECT

Exhibit 11. Sample Regional Bill Comparison – Brea, CA



TASK DELIVERABLES

- Recommended rates under current and up to four (4) alternative rate structures.
- Comparison of typical the City customer bills compared to local utilities.

TASK 7 – FINANCIAL PLANNING AND RATE DESIGN COMPUTER MODEL (WATER AND SEWER COSS)

NewGen’s models allow for automated model updates and data uploads, linking the forecast model to reports directly out of the City’s existing enterprise or accounting systems, allowing the integration of periodic financial reporting, and saving of scenario analysis (i.e., scenario manager). The models are also developed to include a series of manual file updating mechanisms for a series of other data sources. NewGen would review and evaluate the data sources and automation opportunities with the City staff. An illustration of these capabilities is included below.

E. UNDERSTANDING OF PROJECT

Exhibit 12. NewGen Custom Model Data Import Utility

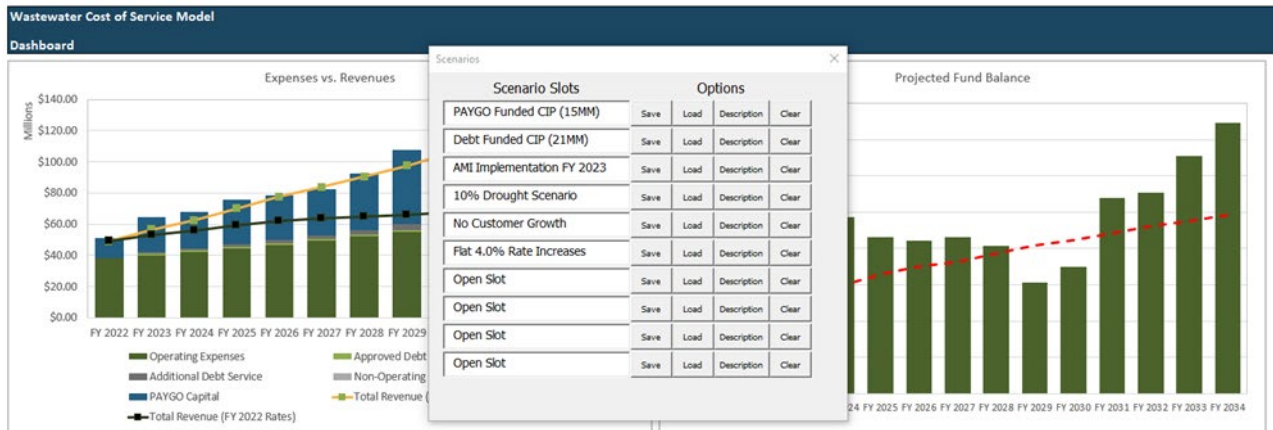
Automated File Import									
Input	Update	Source	Last Updated	Days	File Path to Use	Last Path Used	Last Updated	Check	Source Description
Expense Data	Update	N/A	12/14/2021 15:16	167	S:\Projects\Springfield-MO-Utilities\COS-Model-Review_CO-ER1957\DA\Client-Data\Financial-Data-2020\FY2019-Expenses-including-Fuels-revised.xlsx	S:\Projects\Springfield-MO-Utilities\COS-Model-Review_CO-ER1957\DA\Client-Data\Financial-Data-2020\FY2019-Expenses-including-Fuels-revised.xlsx	ABESHEAR	OK	Database query
Plant in Service	Update	Source	12/14/2021 14:57	167	\\cityutil.com\shared\Secured\RATES\Rates Common\COS\COS 2021\Data Input Files\Plant in Service.xlsx	\\cityutil.com\shared\Secured\RATES\Rates Common\COS\COS 2021\Data Input Files\Plant in Service.xlsx	ABESHEAR	OK	Excel output from PS CU_AM_PLANT_IN_SERVICE2
Accumulated Depreciations	Update	Source	12/14/2021 15:08	167	\\cityutil.com\shared\Secured\RATES\Rates Common\COS\COS 2021\Data Input Files\Accumulated Depreciations.xlsx	\\cityutil.com\shared\Secured\RATES\Rates Common\COS\COS 2021\Data Input Files\Accumulated Depreciations.xlsx	ABESHEAR	OK	Excel output from PS ACCUMULATED_DEPR_NVISION_RPT2
Billing Determinants	Update	Source	5/10/2022 15:58	20	C:\Users\mbermt.NGS\Desktop\Springfield_RD_Electric_v04.xlsm	C:\Users\mbermt.NGS\Desktop\Springfield_RD_Electric_v04.xlsm	mbermt	OK	Output from Rate Design file
Uncollectible Accounts	Update	Source	11/20/2020 10:55	556	S:\Secured\RATES\Rates Common\COS\COS 2021\Data Input Files\Net Write-offs by Rate ID.xlsx	S:\Secured\RATES\Rates Common\COS\COS 2020\NewGen Data Input Files\FY19 Net Write-off by Rate ID.xlsx	ABESHEAR	OK	From BI Report currently named "Rates-Adjustment Report" in the "Rates Dept. Billing Errors" folder. Please update to the "Rates and Fuels" folder and rename the report "Write-off
Rate Description	Update	Source	11/24/2020 15:16	552	S:\Secured\RATES\Rates Common\COS\COS 2020\Data Input Files\Rate Description.xlsx	S:\Secured\RATES\Rates Common\COS\COS 2020\Data Input Files\Rate Description.xlsx	RMCCORMI	OK	Spreadsheet in Data Input folder
Transformers	Update	Source	6/23/2020 9:29	706	S:\Secured\RATES\Rates Common\COS\COS 2020\NewGen Data Input Files\CU_AM_NB_V_ASSET_CLASS_METERS.xlsx	S:\Projects\Springfield-MO-Utilities\COS-Model-Review_CO-ER1957\DA\Client-Data\Plant Data 2020\GIS and Asset Management Data\CU_AM_NB_V_ASSET_CLASS.xlsx	naccardo	FY2019 Data - OK	Haley
A&G Expenses	Update	N/A	12/7/2020 15:37	539	S:\Secured\RATES\Rates Common\COS\COS 2020\NewGen Data Input Files\FY19 A&G charges-before-allocation.xlsx	S:\Secured\RATES\Rates Common\COS\COS 2020\NewGen Data Input Files\FY19 A&G charges-before-allocation.xlsx	RMCCORMI	OK	Database query
Actual Revenues	Update	Source	2/17/2022 10:54	102	S:\Secured\RATES\Rates Common\COS\COS 2021\Data Input Files\Actual Revenues.xlsx	S:\Secured\RATES\Rates Common\COS\COS 2021\Data Input Files\Actual Revenues.xlsx	ABESHEAR	OK	BudXXXXAct file, Actuals tab be sure to check totals column formulas

The model scenario manager allows for multiple versions of all assumptions to be saved and reloaded in real time to create scenarios which can be recovered instantaneously. Examples of assumptions that can be saved and reloaded in this manner to create scenarios include items such as:

- Inflation rates
- O&M cost escalation
- Customer growth rates by rate class
- Debt issuance terms
- Capital project timing
- Capital financing plan
- Water usage by rate class
- Addition and/or removal of customers by class
- Rate changes by month and rate class
- Fund balance reserve policies

Additional entries are included in the model that allow the City to choose further customized assumptions that can be saved. Saved scenarios can be reloaded at any time. An example of the Scenario Manager input window is shown below.

Exhibit 13. NewGen Custom Scenario Manager



E. UNDERSTANDING OF PROJECT

The Financial Planning model includes embedded instructions and guidance that can be accessed within the model's customized menus. NewGen's custom ribbon provides functionality and instructions, in addition to pop-up windows with additional capability to drill down into specific areas for instructions as shown below.

Exhibit 14. NewGen Custom Model Ribbon



NewGen's model also includes integrated error and data validity checking. The integrated error checking includes the ability for update notifications, user updates logs, and version control.

7.2 – CONDUCT TRAINING SESSION

NewGen will conduct a one-day training session to train City staff on the use, modification, and update of the financial models. This meeting will train staff to use the model to re-run scenarios, change assumptions, re-configure analysis to drive additional revenues, and other key items to ensure that staff has the knowledge and experience to make full use of NewGen's model.

7.3 – USER MANUAL

NewGen will deliver to the City user manuals for both the water and sewer COS models. While the models will contain embedded instructions, the user manual will focus on the navigation and manipulation of key model tabs. The user manual will include snapshots of model components and pop-up windows.

TASK 8 – DELIVERABLES (WATER AND SEWER COSS)

NewGen will develop the following deliverables for each COSS:

1. Draft Report – This report will be provided to City staff for review and comment. It will then be discussed at a meeting of the City Council.
2. Final Draft Report – After comments provided by the City Council, NewGen will update the draft report and bring it back in front of the Council for final approval of mailing Proposition 218 notices.
3. Calculation Book – NewGen's financial model, as described previously, will contain all the calculations made to arrive at our recommended rates. The model contains no hidden cells or formulae that would obscure the rate setting process. Users will be able to trace each Test Year dollar to the corresponding rate that collects that dollar.
4. Computer Model – As discussed previously, NewGen will deliver to the City a computer model or models setting forth the data and calculations used to complete the study. The model will become the property of the City for the purposes of running additional scenarios and updating data as it becomes available.
5. User Manual – NewGen will compile a user manual for the financial model or models developed during the study. As NewGen's models include embedded instructions on each model tab, the User Manual will be focused on how to navigate NewGen's model and use the various custom forecasting tools.

E. UNDERSTANDING OF PROJECT

TASK 9 – MEETINGS AND PRESENTATIONS (WATER AND SEWER COSS)

NewGen will attend meetings at the request of the City throughout the study. Our scope of work includes the following meetings:

1. **Meeting 1** – In-person Project Kickoff meeting (see Task 1.3).
2. **Meeting 2** – A virtual meeting with City staff to discuss the 25% complete status of the studies.
3. **Meeting 3** – An in-person meeting with City staff to discuss the 50% complete status of the studies.
4. **Meeting 4** – After the delivery of the draft reports, NewGen will hold a virtual meeting with City staff to discuss the proposed rates, project methodologies, and timing of public meetings.
5. **Meeting 5** – An in-person meeting with the City Council to discuss the draft reports.
6. **Meeting 6** – An in-person meeting with the City Council to discuss the final reports.
7. **Meeting 7** – An additional in-person or virtual meeting at any point in the study.

TASK 10 – ADDITIONAL RATE STUDY SERVICES (WATER AND SEWER COSS, AS NEEDED)

NewGen's project team will be available for additional services related to each COSS including coordination with the City attorney and the City's Communication Department. NewGen's scope of work includes an assumption of additional effort related to:

1. An additional water and sewer financing plan.
2. One additional in-person meeting beyond what is stated in Task 9.
3. Support in developing the City's Proposition 218 notices.
4. Support in responding to any challenges received during the Proposition 218 process.

NEWGEN'S QA/QC PROCESSES

NewGen recognizes that the quality of our analysis and work product is of paramount importance. To serve as a trusted advisor to our clients, it is critical that our work be of the highest caliber. Mistakes challenge our credibility with colleagues and clients and can lead to serious negative consequences. Given this, each engagement must be conducted under strict quality assurance/quality control (QA/QC) procedures. NewGen's internal QA/QC program involves three key levels of review for every project:

LEVEL 1 – PERSONAL

At the first level of our QA/QC program, every consultant is personally responsible for their work product. Any product developed internally should be considered "client-ready" prior to being submitted to higher levels of management for review. To assist consultants in ensuring that their work product meets these standards, NewGen has developed and utilizes a "CHECK-UP" process, as demonstrated by the graphic to the right. Utilizing this as an acronym, NewGen encourages its consultants to apply each of these standards to every analysis conducted or work product prepared.



E. UNDERSTANDING OF PROJECT

LEVEL 2 – PEER

The second level of our QA/QC process involves a peer review of all analysis and work product. As part of this process, NewGen has designated experts in each subject matter area to serve as “qualified reviewers.” Each analysis or work product is reviewed and approved by a qualified reviewer prior to further transmission to a client.

LEVEL 3 – PRODUCT

The final level of review in our QA/QC process seeks to ensure that the product we develop and publish is reflective of the high standards of our Firm. Each deliverable is reviewed by our administrative staff to ensure it meets the quality standards of a NewGen product, regardless of the individual or office that produced the product. Additionally, integrated and embedded in the product is a QA/QC process which automatically checks calculations and formulas that ensure the model is operating properly and concisely. This process notifies users if the model was updated or if any errors are present.

IMPLEMENTATION

NewGen conducts annual training for employees on the QA/QC process. This includes in-person, multi-day workshops on project management and the proper application of the QA/QC procedures. Furthermore, each employee’s annual performance review has an entire section devoted to work quality and assesses the employee’s application of the above outlined process.

CALCULATIONS

- Affirm internal checks are in place and not producing errors.
- Review model formula links and named ranges. Remove links to files that should not be included and remove unused named ranges.
- Print out and spot check final drafts to ensure accuracy.

HOLISTIC

- Have you gotten out of the details and looked at the big picture?
- Look for changes in prior drafts. Do the changes in the model make sense?
- Compare model data with other sources of available information to ensure accuracy. Do our results make sense?

ENGLISH

- Proper grammar
- Spell check

COMPOSITION

- How does your product look?
- Is it formatted correctly?
- Is it organized and easy to follow? Remove unused data and side calculations.

KNOWLEDGE

- Does it reflect industry standards and represent a quality product?

UNDERLYING ASSUMPTIONS AND NOTES

- Clearly document and affirm assumptions.
- Include notes/methodology description in analysis if calculations are complicated. This will help to explain why and how these calculations were done for future reference.

PRINT READY

- Make sure document is print ready.

PROJECT SCHEDULE

NewGen’s proposed project schedule is below.

Exhibit 15. Proposed Project Schedule

Task #	Task	2025												2026				
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5
Task 1	Initial Meeting And Data Collection																	
Task 2	Projection Of Revenues Under Existing Rates																	
Task 3	Development Of Revenue Requirements And Cash Flow Analyses																	
Task 4	Evaluation Of Customer Classes																	
Task 5	Cost Of Service Allocations																	
Task 6	Design Rates And Charges																	
Task 7	Financial Plannning And Rate Design Computer Model																	
Task 8	Deliverables																	
Task 9	Meetings And Presentations																	
Task 10	Additional Rate Study Services																	
Deliverables:		Meetings:																
A - Calculation Book, Computer Model, and User Manual		1 - Kickoff Meeting																
B - Draft Report		2 - 25% Complete (Staff)																
C - Revised Draft Report		3 - 50% Complete (Staff)																
D - Final Draft Report		4 - Draft Report (Staff)																
		5 - Draft Report (Council)																
		6 - Final Draft Report (Council)																
		PH - Proposition 218 Public Hearing																

The above schedule includes several key assumptions:

- 1. Notice to proceed on or before January 1, 2025.
- 2. Approval of Proposition 218 notice in January 2026.
- 3. Mailing of Proposition 218 notices in February 2026, beginning the required 45-day notice period.
- 4. Proposition 218 required Public Hearing in April 2026, at which rates are adopted.
- 5. Study recommended FY 2027 rates effective July 1, 2026.

PROPOSED SUBCONTRACTING ARRANGEMENTS

Upon review of the City’s Request for Proposals, NewGen affirms that no subconsultants will be needed in order to complete the requested work.

F.

REFERENCES

Our proposal includes references for projects in California that involve adherence to Proposition 218 and the unique circumstances of California water utilities. These projects demonstrate our firm's capability to develop detailed, cost-based rates supported by sophisticated data analysis.

COACHELLA VALLEY WATER DISTRICT, CA – DOMESTIC WATER COST OF SERVICE STUDY (2021 – 2024)

REFERENCE: David Lacy | Finance Manager | 760.398.2661 x 2304 | dlacy@cwvd.org

ADDRESS: 51501 Tyler Street, Coachella, CA 92236

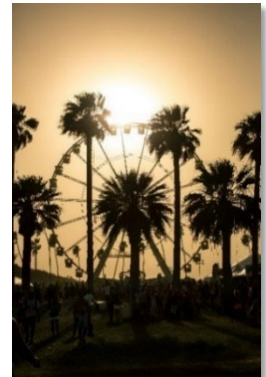
Coachella Valley Water District (CVWD) is a special district established by the state legislature. CVWD was formed in 1918 to protect and conserve local water sources. Since then, the District has grown into a multifaceted agency that delivers irrigation and domestic (drinking) water, collects, and recycles wastewater, provides regional storm water protection, replenishes the groundwater basin, and promotes water conservation.

The District uses a budget-based increasing tier rate structure for its consumption charges. Each customer has an individualized "water budget." While some agencies may characterize water budgets as a means to encourage conservation or efficiency, the true purpose of a water budget is to align individual customer water demands with the District's total cost to develop incremental water supply and distribution over long timespans.

The overall goals of the Domestic Water Study were focused on developing a financial plan and proposed rate structure that: meet the District's financial, operational, and capital needs in a manner that equitably distributes costs and maintains the affordability of potable water service. Specific goals include:

- Develop a rate structure in line with California Proposition 218.
- Set rates such that operating cash flows would remain positive for all fiscal years. This goal intends to avoid the creation of a structural operating deficit within the utility.
- Set rates such that the Domestic fund reserves can be maintained at the targeted level while providing funding for necessary capital projects.
- Utilize unrestricted reserves above the reserve policy target to fund capital projects in order to minimize rate increases.
- Calculate rates that follow industry best practices and cost of service principles.

NewGen's work with CVWD was completed in 2024 at which time the District unanimously adopted NewGen's recommended rates.



CITY OF BREA, CA – WATER AND SEWER RATE AND IMPACT FEE STUDY (2021 – 2023)

REFERENCE: Faith Madrazo. | Financial Services Manager | 714.671.4486 | faithm@cityofbrea.net
ADDRESS: 1 Civic Center Circle, Brea, CA 92821

Brea imports 100% of its water from two major water suppliers, Metropolitan Water District and Cal Domestic. Both suppliers have increased their rates consistently over that past several years. In addition, the City is required to expend capital for essential maintenance and improvements to the Brea water system. The City of Brea selected NewGen after a competitive procurement to perform a water and sewer rate and impact fee study with the following objectives:



- Develop a five-year rate forecast for the water and sewer enterprise funds.
- Develop cost-based impact fees for the water and sewer systems.
- Calculate drought rates based on historical demand impacts of various drought restrictions.
- Determine an appropriate fixed cost recovery mechanism related to multi-family and master-meter customers.
- Evaluate the costs incurred by the water and sewer enterprises on the City itself, and the services required by the City of the water and sewer enterprises. Incorporate these additional expenses and revenues into the City's water and sewer rates.
- Conduct Council work sessions and public outreach meetings throughout the study to solicit input from City stakeholders.

NewGen's water and sewer rate and impact fee recommendations were all approved by Council vote.

SAN DIEGO COUNTY WATER AUTHORITY, CA – WATER COST OF SERVICE EXPERT WITNESS ANALYSIS AND TESTIMONY (2016-ONGOING)

REFERENCE: Amy Chen. | Director of MWD Program | 213 628 1244 | achen@sdcca.org
ADDRESS: 4677 Overland Avenue, San Diego, CA 90012

Over a multi-year period, NewGen, has provided various financial and technical analyses to this large wholesale water agency in a very significant dispute with the Metropolitan Water District of Southern California ("MWD") over the pricing of potable water and the pricing of wheeling services for SWP water moved through MWD's system on behalf of the San Diego County Water Authority (SDCWA). Among the key analysis / investigation topics for NewGen were:



- Compliance of MWD with water industry standards set forth in AWWA's Manual M1 for developing revenue requirements and allocating costs to functions / services.
- MWD's derivation of its various rates and fees – tracing adopted rates to source documents and through cost of service allocations.
- Reverse engineering of MWD's financial model.
- Documentation of MWD's cost of service methodology.
- Compliance with Prop 26 as to inclusion of certain categories of costs or programs in MWD's rates / taxes.
- Review and analysis of various reports and documents on behalf of SDCWA.
- Preparation of interrogatories, and support for depositions.

Our work on this series of related legal actions is ongoing.

G. DISCLOSURE OF CLAIMS / LAWSUITS

All affirmations below are true and correct at the time of proposal submission.

I. LAWSUITS

NewGen affirms that no lawsuits against our firm which concern breach of contract, professional negligence, errors and omissions, malpractice, improper practices, or ethics violations have been filed in court or arbitration arising out of our services in the past five years.

II. CLAIMS

NewGen affirms that our firm has not made any claim against a public agency which concerns work performed by our firm pursuant to a contract or payment for a contract and filed that claim in court or arbitration in the past five years.

H. COST PROPOSAL

NOT-TO-EXCEED COST

Our not-to-exceed cost proposal for the scope of work specified by the City’s RFP is **\$192,120**, comprised of the following:

- 1. Comprehensive Water Rate Study: **\$113,615**.
- 2. Comprehensive Sewer Rate Study: **\$78,505**.

BASIS OF NOT-TO-EXCEED COST

We develop our cost proposals by determining the number of hours of effort that will be required by each of our proposed project staff on a task-by-task basis and multiplying this number by each staff member’s hourly rate. To this estimate of professional fees, we add estimated out-of-pocket at actual cost, with no profit or overhead added to out-of-pocket expenses. Any discounts received (car rentals, hotels, etc.) are passed through to the client.

We have provided a rate sheet below that shows the hourly rates that would apply to any ad hoc or out of scope services related to the COSS and rate setting process. NewGen does not charge any fees for equipment or special services. The following rates would apply as after-hour rates with no markup. NewGen does not charge ancillary fees for things such as printing, technology, conference call services, or other such items.

Exhibit 16. Table of Hourly Rates

Employee	Position	Hourly Rate
Callocchia	Partner / Project Manager	\$300
Cambell	Managing Director - Water	\$365
Wright	Senior Manager	\$250
Carnes	Manager	\$200
Oates	Senior Consultant	\$190
Robinson	Consultant	\$170
Various	Administrative Support	\$140

The following pages provide detailed breakdowns of both the water and sewer studies.

H. COST PROPOSAL

Exhibit 17. Comprehensive Water Rate Study Budget

Comprehensive Water Rate Study		Callocchia	Campbell	Wright	Carnes	Oates	Robinson	Admin	Hours	Professional Fees	Out-of-Pocket Expenses	Total
Task		\$300	\$365	\$250	\$200	\$190	\$170	\$140				
Task 1	Initial Meeting And Data Collection	8	8	4	8	4	4	-	36	\$ 9,360	\$ 2,250	\$ 11,610
Task 2	Projection Of Revenues Under Existing Rates	4	2	-	4	12	12	-	34	\$ 7,050	\$ -	\$ 7,050
Task 3	Development Of Revenue Requirements And Cash Flow Analyses	6	3	18	6	18	18	-	69	\$ 15,075	\$ -	\$ 15,075
Task 4	Evaluation Of Customer Classes	4	2	-	4	6	6	-	22	\$ 4,890	\$ -	\$ 4,890
Task 5	Cost Of Service Allocations	6	3	-	6	18	12	-	45	\$ 9,555	\$ -	\$ 9,555
Task 6	Design Rates And Charges	6	3	-	6	12	12	-	39	\$ 8,415	\$ -	\$ 8,415
Task 7	Financial Plannning And Rate Design Computer Model	4	2	8	6	12	12	-	44	\$ 9,450	\$ -	\$ 9,450
Task 8	Deliverables	12	12	6	12	18	18	9	87	\$ 19,620	\$ -	\$ 19,620
Task 9	Meetings And Presentations	12	4	6	12	12	12	6	64	\$ 14,120	\$ 3,750	\$ 17,870
Task 10	Additional Rate Study Services	8	2	2	6	6	6	6	36	\$ 7,830	\$ 2,250	\$ 10,080
Labor Hours		120	68	72	120	192	184	36	476			
		Subtotal								\$105,365	\$ 8,250	
		Total Not-To-Exceed Cost										\$113,615

Out of pocket expenses assume total costs of \$1,500 per person per trip and eleven person-trips, assigned 50/50 to the water and sewer studies:

1. Task 9, Meeting 1: Kickoff meeting with three key NewGen personnel (Callocchia, Campbell, Carnes).
2. Task 9, Meeting 3: Key NewGen personnel (Callocchia, Campbell, Carnes) will discuss the study's 50% completion milestone.
3. Task 9, Meeting 5: A meeting with City Council at which Mr. Callocchia will discuss the study's draft report.
4. Task 9, Meeting 6: A meeting with City Council at which Mr. Callocchia will discuss the study's final report.
5. An additional in-person meeting with key NewGen personnel (Callocchia, Campbell, Carnes) assumed as a part of Task 10, Additional Services.

H. COST PROPOSAL

Exhibit 18. Comprehensive Sewer Rate Study Budget

Comprehensive Sewer Rate Study		Callocchia	Campbell	Wright	Carnes	Oates	Robinson	Admin	Hours	Professional Fees	Out-of-Pocket Expenses	Total
Task		\$300	\$365	\$250	\$200	\$190	\$170	\$140				
Task 1	Initial Meeting And Data Collection	8	8	4	8	4	4	-	36	\$ 9,360	\$ 2,250	\$ 11,610
Task 2	Projection Of Revenues Under Existing Rates	4	2	-	4	12	12	-	34	\$ 7,050	\$ -	\$ 7,050
Task 3	Development Of Revenue Requirements And Cash Flow Analyses	2	1	6	2	6	6	-	69	\$ 5,025	\$ -	\$ 5,025
Task 4	Evaluation Of Customer Classes	4	2	-	4	6	6	-	22	\$ 4,890	\$ -	\$ 4,890
Task 5	Cost Of Service Allocations	2	1	-	2	6	4	-	45	\$ 3,185	\$ -	\$ 3,185
Task 6	Design Rates And Charges	2	1	-	2	4	4	-	39	\$ 2,805	\$ -	\$ 2,805
Task 7	Financial Planning And Rate Design Computer Model	4	2	8	6	12	12	-	44	\$ 9,450	\$ -	\$ 9,450
Task 8	Deliverables	4	4	2	4	6	6	3	87	\$ 6,540	\$ -	\$ 6,540
Task 9	Meetings And Presentations	12	4	6	12	12	12	6	64	\$ 14,120	\$ 3,750	\$ 17,870
Task 10	Additional Rate Study Services	8	2	2	6	6	6	6	36	\$ 7,830	\$ 2,250	\$ 10,080
Labor Hours		120	68	72	120	192	184	36	476			
		Subtotal								\$ 70,255	\$ 8,250	
		Total Not-To-Exceed Cost										\$ 78,505

Out of pocket expenses assume total costs of \$1,500 per person per trip and eleven person-trips, assigned 50/50 to the water and sewer studies:

- Task 9, Meeting 1: Kickoff meeting with three key NewGen personnel (Callocchia, Campbell, Carnes).
- Task 9, Meeting 3: Key NewGen personnel (Callocchia, Campbell, Carnes) will discuss the study's 50% completion milestone.
- Task 9, Meeting 5: A meeting with City Council at which Mr. Callocchia will discuss the study's draft report.
- Task 9, Meeting 6: A meeting with City Council at which Mr. Callocchia will discuss the study's final report.
- An additional in-person meeting with key NewGen personnel (Callocchia, Campbell, Carnes) assumed as a part of Task 10, Additional Services.

I. NO DEVIATIONS FROM THE RFP

In submitting a proposal in response to the City's RFP, NewGen certifies that we take no exceptions to the RFP, including, but not limited to the "Professional Services Agreement" attached to the RFP as Attachment 1.

NewGen
Strategies & Solutions



APPENDIX A: RESUMES OF KEY PERSONNEL

REQUEST FOR PROPOSALS

**COMPREHENSIVE WATER AND
WASTEWATER RATE STUDY**



ERIC CALLOCCHIA

Partner & Deputy Managing Director – Client Relations & Services

CONTACT

900 Bestgate Rd., Ste. 402
Annapolis, MD 21401
ecallocchia@newgenstrategies.net
www.newgenstrategies.net

EDUCATION

Bachelor of Arts in Economics and
Mathematics, Johns Hopkins University

PROFESSIONAL REGISTRATIONS/ CERTIFICATIONS/COMMITTEES

American Water Works Association –
Active member of the AWWA Rates and
Charges Committee and Cost of Service
Subcommittee

KEY EXPERTISE

Cash Flow Sensitivity Analysis

Econometrics

Economic Impact Analysis

Financial Modeling

Public Finance

Utility Management

Utility Rate and Fee Design

Water and Wastewater Cost of Service
Analyses

Mr. Eric Callocchia has 13 years of utility cost of service and financial consulting experience. His expertise involves a broad range of industry issues, including revenue stability, customer affordability, cost of service rate making, and public engagement and education. His expertise in utility cost of service is rooted in his exceptional analytic skills and broad experience, which ensure that the recommendations he develops are understandable and withstand legal scrutiny.

Mr. Callocchia is a contributing author to the most recent edition of the Water Environment Federation's Manual of Practice 27 – Financing and Charges for Wastewater Systems. He is an active member of the American Water Works Association (AWWA) Rates and Charges Committee and a contributing author to the upcoming eighth edition of AWWA's Manual M1 – Principles of Water Rates, Fees, and Charges.

RELEVANT EXPERIENCE

Water/Sewer/Stormwater Rate Studies

Mr. Callocchia provides water, wastewater, and stormwater industry expertise and policy guidance to NewGen's clients. His rate study approach involves the development of customized financial models that focus on the policy issues, cash needs, revenue requirements, and key performance indicators of each client. His models equip clients with the necessary information to make critical capital financing decisions and rate adjustments to finance their system's operation, asset maintenance, and replacement needs while maintaining fund balance policies based on industry best practices. The models also have the capability of scenario analysis and can be incorporated with operating and capital expense and revenue projects. Mr. Callocchia develops and recommends alternative rate structures and assists with implementing phased-in rate plans that address client issues and maintain the financial health of utility funds. Mr. Callocchia also provides expert guidance on managing water, sewer, and stormwater utilities, including developing policies and procedures related to customer service, organizational communication, and public outreach.

Clients that Mr. Callocchia has provided these services include:

- Albemarle County, VA
- Anne Arundel County, MD
- Bloomington and Normal Water Reclamation District, IL
- City of Annapolis, MD
- City of Brea, CA
- City of Charlottesville, VA
- City of Concord, CA
- City of Dover, DE
- City of Falls Church, VA
- City of Frederick, MD
- City of Fredericksburg, VA
- City of Hagerstown, MD
- City of Hampton, VA
- City of Naperville, IL
- City of North Kingstown, RI
- City of Park Ridge, IL
- City of Portsmouth, VA
- City of Prospect Heights, IL
- City of Richmond, VA
- City of Rockville, MD

ERIC CALLOCCHIA

Partner & Deputy Managing Director – Client Relations & Services

Water/Sewer/Stormwater Rate Studies (cont.)

- City of Salisbury, MD
- City of Westminster, MD
- Coachella Valley Water District, CA
- Delaware County Regional Water Quality Control Authority (DELCROA), PA
- Frederick County, MD
- Jericho Water District, NY
- Jurupa Community Services District, CA
- King George County Service Authority, VA
- Loudoun Water, VA
- Rivanna Water and Sewer Authority, VA
- Somerset County Sanitary District, MD
- Town of Barnstable, MA
- Town of Colonial Beach, VA
- Township of East Brunswick, NJ
- Town of Elkton, MD
- Town of Fairfield WPCA, CT
- Town of Herndon, VA
- Town of Lovettsville, VA
- Town of Middleburg, VA
- Town of Pound, VA
- Town of Purcellville, VA
- Town of Wallingford, CT
- Town of Vienna, VA
- Village of Addison, IL
- Village of Fox Lake, IL
- Village of Libertyville, IL
- Village of Lindenhurst, IL
- Village of Lombard, IL
- Village of Orland Park, IL
- Village of Westchester, IL
- Washington Suburban Sanitary Commission, MD
- Wise County Public Service Authority, VA

Stormwater Feasibility and Fee Studies

Libertyville, IL

In 2019, the Village engaged NewGen to complete a feasibility study to project the costs of implementing a Master Stormwater Management Plan (MSM) and to determine the appropriate methodology to charge Village citizens the fees for the MSM-planned projects. The Village also tasked NewGen with developing credit policies and manuals, appeal procedures, and an appropriate Stormwater Ordinance. Mr. Callocchia developed a financial model that projected the twenty-year cost of the Village's MSM and the various impervious area-based cost allocation methods the Village could adopt as a funding mechanism. Mr. Callocchia's feasibility study allowed Village staff and elected officials to evaluate the various stormwater funding alternatives and implement industry best practices for the administration of its stormwater management program. Mr. Callocchia finalized the impervious area and utility billing databases. He also coordinated with Village staff to develop an interactive online fee lookup tool that allowed Village citizens to see their potential stormwater fee before it became effective. Mr. Callocchia also worked with Village staff to conduct two Town Hall-style public information sessions before the fee became effective.

Westminster, MD

The City of Westminster serves as the County Seat. It is in the center of Carroll County, conveniently located near Maryland's largest cities, two state capitals, Annapolis and Harrisburg, and the nation's Capital. The City had historically faced challenges when funding stormwater operations and capital costs. In the past, the City had not accounted in a detailed fashion for the actual stormwater management costs, with most of the costs absorbed by the City's streets and road maintenance accounted for in the General Fund. The City engaged NewGen in 2019 to complete a feasibility study with several tasks:

- Identify and isolate the actual cost of stormwater maintenance.

ERIC CALLOCCHIA

Partner & Deputy Managing Director – Client Relations & Services

- Develop and recommend a ten-year stormwater CIP given the City's asset listing and future stormwater needs.
- Recommend policies regarding stormwater fees and credits.
- Engage in a public information campaign to educate the City's citizens on the need for additional resources for stormwater management.
- Assist in implementing a Stormwater Utility that properly accounts for the City's stormwater costs.

Mr. Callocchia developed a financial model detailing the City's stormwater costs and helped the City implement a stormwater fee tied to the account information of City sewer users.

Frederick County, MD

Frederick County, Maryland, was anticipating the issuance of a Municipal Separate Storm Sewer System (MS4) Permit from the Maryland Department of the Environment (MDE) that would place a particular cost burden on the County's 48,000 stormwater fee payers. Mr. Callocchia developed a financial model that determined the Maximum Extent Practicable (MEP) level the County could reasonably fund, given current funding levels, median household income, and the County's procurement limitations. Mr. Callocchia's financial model allowed for a sensitivity analysis to determine the possible increase in funding given several factors. The County used Mr. Callocchia's analysis to appeal the permit requirements and reduce the financial impact on the County's customers by reducing the mandated spending related to the permit and lengthening the required implementation timeframe.

Geneva, IL

The City of Geneva was actively involved in developing the Kane County Stormwater Management Ordinance in 1998. Geneva became a "certified community" in 2001 by adopting the final version of the City's stormwater ordinance. The Lake County Stormwater Management Commission provided a template that was the basis of the City's Stormwater Management Program Plan (SMPP). The plan aimed to meet the minimum standards required by the U.S. Environmental Protection Agency (EPA) under the National Pollutant Discharge Elimination System (NPDES) Phase II program.

Mr. Callocchia led a team that conducted a financial analysis as a part of a Citywide Watershed Study. The City supported the drainage and stormwater-related costs through its General Fund. His role in the Watershed Study was to support and participate in the initial City staff meeting to establish a City Vision document. Mr. Callocchia also identified current grants and funding sources and developed funding strategies to facilitate the City's Public Works Department's capital and operational needs related to their drainage infrastructure responsibilities. He recommended funding gap strategies associated with an annual program and budget. Mr. Callocchia also participated in and supported a City Council strategic planning workshop on the topic related to the Citywide Stormwater Report and financial perspectives.

Water and Sewer Revenue Bond Feasibility Study

Mr. Callocchia developed a water and sewer rate model for the City of Annapolis, Maryland that projected various debt scenarios, including bond coverage calculations and cash-on-hand target projections. The City was able to generate ratings of AA-, Aa3, and AA- from the three major rating agencies and issue revenue bonds totaling \$30,755,000 on schedule, thanks to the feasibility report generated by Mr. Callocchia's team.

ERIC CALLOCCHIA

Partner & Deputy Managing Director – Client Relations & Services

Litigation Support

Utility Billing Dispute

Silgan Plastics is the leading manufacturer of metal containers in North America and Europe and the largest manufacturer of metal food containers in North America, with a volume of approximately half the market share in the United States of America. They are also a leading worldwide manufacturer of metal, composite, and plastic closures for food and beverage products. Mr. Callocchia led a team to evaluate the utility rate charges for a selection of Silgan's manufacturing plants and assisted Silgan in settling rate disputes with local utility providers. Mr. Callocchia's detailed evaluations and expert analysis resulted in a settlement agreement for more than \$500,000 above the amount offered to Silgan before Mr. Callocchia's involvement.

Water Rate Litigation

The San Diego County Water Authority (SDCWA) and The Metropolitan Water District of California (MWD) were engaged in litigation regarding the water rates charged to SDCWA by MWD. Mr. Callocchia developed a report on MWD's rate-setting methodology and how it relates to the principles and industry standard practices detailed in the American Water Works Association (AWWA) Manual M1 - Principles of Water Rates, Fees, and Charges. Mr. Callocchia's evaluation assisted SDCWA in showing the illegality of MWD's rates based on their non-conformity to AWWA standards and California Law (Proposition 26). Mr. Callocchia's work involved cost-of-service analysis and knowledgeable explanation of industry standards to the Superior Courts of California. After Mr. Callocchia's report, a judge ruled in favor of the Water Authority, saying MWD's rates for 2011-2014 were illegal and awarded SDCWA \$235 million. Upon appeal, the appellate court ruled in favor of MWD on one of twelve issues. The California Supreme Court denied a petition by SDCWA to review the appellate court ruling. The results of the dispute in which Mr. Callocchia was involved as an expert were:

- MWD must pay the Water Authority approximately \$51 million for the so-called "Water Stewardship" charges that MWD added to the transportation rates it charged the Water Authority from 2011-2014. The decision prevents MWD from imposing more than \$20 million in illegal charges annually in the future. By 2047, those unlawful charges would have amounted to approximately \$1.1 billion.
- MWD unlawfully under-calculated the Water Authority's statutory water rights to MWD's water supply.
- A contract clause MWD used to disqualify local water supply projects in San Diego County from receiving funding from MWD was unconstitutional.
- Engage in a public information campaign to educate the City's citizens on the need for additional resources for stormwater management.
- Assist in implementing a Stormwater Utility that properly accounts for the City's stormwater costs.

Benefit Assessment Dispute

The City of Westminster, Maryland, was sued by a new customer who alleged that the methodology used by the City to calculate its water and sewer benefit assessments, commonly known in the utility industry as System Development Charges, was unlawful. Mr. Callocchia was an expert witness detailing the industry standard methodologies used to calculate these fees and provided the Court with the rationale and basis for the City's fees. The Court ultimately found that the City's fees were not illegally calculated based on the City's testimony, which included Mr. Callocchia's expert witness statements.

ERIC CALLOCCHIA

Partner & Deputy Managing Director – Client Relations & Services

PRESENTATIONS AND PUBLICATIONS

- *WEF Manual 27, Financing and Charges for Wastewater Systems*, Contributing Author
- *Setting Water and Sewer Rates in New York State While Addressing the Challenges of 2020*
New York State GFOA 2020 Northeast Holiday Seminar, 2020
- *Setting Water and Sewer Rates*
New York State GFOA 38th Annual Conference, 2017
- *A World without Crystal Balls: Attempting to Forecast Operating Expenses*
Tri-Association Conference, 2016
- *Enhanced General Fund Reimbursement by Enterprise Funds*
Brown Edwards Conference, 2014



Richard Campbell

Managing Director – Water Practice

CONTACT

275 W. Campbell Road, Suite 440
Richardson, TX 75080
rcampbell@newgenstrategies.net
www.newgenstrategies.net

EDUCATION

Bachelor of Science, Electrical
Engineering, University of Central Florida

United States Naval Nuclear Power
Program

PROFESSIONAL REGISTRATIONS/ CERTIFICATIONS/COMMITTEES

AWWA's National Rates and Charges
Committee

Finance, Accounting and Management
Committee

KEY EXPERTISE

Asset Planning and Management

Cost of Service and Rate Design

Economic Feasibility Studies

Financial Modeling

Valuation Studies

Mr. Richard Campbell with over 36 years of experience in the industry, previously serving as the Financial Services Director of Freese and Nichols. He has led several complex electric, natural gas, and water/wastewater utilities projects. Mr. Campbell is an expert in a full range of utility finance issues, including debt issuance support (revenue bond feasibility); valuation studies for acquisitions and mergers; alternative capital financing analyses; economic feasibility studies; wholesale and retail ratemaking/cost of service; impact fee/system development fee analysis; asset planning and asset management; development of renewal and replacement programs; and strategic and business planning.

PRIOR RELEVANT EXPERIENCE

Cost of Service and Rate Design Study

Mr. Campbell has led and assisted with financial evaluations for water, wastewater, stormwater, and sewer utilities to safeguard their financial integrity through comprehensive cost of service analyses, including wholesale services. Mr. Campbell has participated in water, wastewater, stormwater, and/or sewer cost of service and rate design studies for the following entities, to name a few:

- Allegheny County Sanitary Authority
- City of Brownsville, TX
- City of Columbia, SC
- City of Dallas, TX
- City of Duncan, OK
- City of Garland, TX
- City of Grand Prairie, TX
- City of High Point, NC
- City of Lawton, OK
- City of Pittsboro, NC
- City of Raleigh, NC
- City of Round Rock, TX
- City of Siler City, NC
- City of Stephenville, TX
- Fort Worth Water
- Jacksonville Electric Authority
- Miami-Dade County Water and Sewer Department
- NBU, New Braunfels, TX
- San Antonio Water System

Impact Fee Analysis/Study

Mr. Campbell has led or assisted in impact fee analysis to assist communities in setting the most appropriate fee amounts using a more comprehensive credit calculation. His clients include:

- City of Brownsville, TX
- City of Columbia, SC
- City of Irving, TX
- City of Shreveport, LA
- City of Wilmer, TX
- Fort Worth Water
- Jacksonville Electric Authority
- New Braunfels Utilities, TX

Richard Campbell

Managing Director – Water Practice

Other Projects

Mr. Campbell has also led other projects, including:

Revenue Bond Feasibility Report – City of High Point, NC

Mr. Campbell served as the Project Manager for multiple bond feasibility studies in 2004, 2006, 2008, 2010, and 2014 for the City of High Point for inclusion into official statements for Revenue Bond issuances totaling greater than \$176 million to fund water and sewer capital improvements.

Water and Sewer Revenue Bond Issuance, Consulting Engineer's Report – Miami-Dade County Water and Sewer Authority

In 2017, the Miami-Dade County WASD issued Revenue Bonds totaling \$929,380,000. Mr. Campbell was the Project Manager responsible for developing the required issuance of a Consulting Engineer's Report and the associated financial feasibility study. Based upon the requirements of existing bond ordinances, the Water and Sewer Department must have the system inspected, in its entirety, every three years. Arcadis performed this work, and the results are incorporated as a part of the CE report for inclusion in the bond issuance official statement, as are the results of the feasibility study, which attests to the financial well-being of the system and its ability to meet the needs of its customers and the additional financial burdens of the new bond issue.

Wastewater Cost of Service Rate Study, Financial Forecast and Wet Weather Plan Feasibility Analysis – Allegheny County Sanitary Authority

As Project Manager, Mr. Campbell was responsible for developing a detailed and comprehensive financial planning model to help the Allegheny County Sanitary Authority (ALCOSAN) determine the financial impact of eliminating sewer overflows from the 83 municipalities in its wastewater treatment service area. The model helped ALCOSAN compare multiple capital spending scenarios associated with various Wet Weather Plan options, cash financed capital, bond issuances, and rate increases over a 30-year forecast period. Mr. Campbell was also responsible for developing a cost of service and rate design model that helped ALCOSAN determine the cost of providing service to its customers and various rate design options that would enable them to recover these costs through user rates.

Inside-Outside City Rate Differential Study – City of Fort Worth, TX

Mr. Campbell served as Project Manager for a water/wastewater Inside-City/Outside-City rate differential study to determine fair and equitable rates applicable to outside-city customers. This process required a cost-of-service evaluation to allocate proper costs to various rate classes based on a pre-determined test.

Asset Management Study – City of Garland, TX

Mr. Campbell served as Project Manager in working with the City to evaluate its wastewater facilities and develop an asset management program to assist in tracking and maintaining the records and database of the system assets.

Development of Stormwater Financial Model – City of Raleigh, NC

Mr. Campbell served as Project Manager and provided the City of Raleigh's Stormwater Department with an interactive, Windows-driven financial model to assist staff in budgeting and projecting expenditures and revenue needs and rate-setting capabilities. The process allowed staff to track operational targets and provided reporting capabilities for operations staff and upper-level management.

Richard Campbell

Managing Director – Water Practice

Stormwater Division Revenue Bond Feasibility Report – City of Raleigh, NC

Mr. Campbell served as Project Manager for a Revenue Bond feasibility study in 2008 for the City of Raleigh's Stormwater Division for inclusion into an official statement for a Revenue Bond issuance to fund capital improvements for the system.

Billing/Metering Conversion Analysis – City of Raleigh, NC

Mr. Campbell served as Project Manager/Client Coordinator for an analysis of the financial impact of switching current billing practices to operate every month from a bi-monthly basis. Included in this analysis was the potential impact on the system and its customers should the City pursue varying levels of improved technologies in the billing and metering processes.

Revenue Bond Feasibility Report – City of Raleigh, NC

Mr. Campbell served as Project Manager for multiple bond feasibility studies in 2006 and 2008 for the City of Raleigh for inclusion into official statements for Revenue Bond issuances totaling greater than \$410 million to fund water and sewer capital improvements, as well as for refunding of existing debt.

10-Year Capital Financing Analysis – City of Raleigh, NC

As Project Manager, Mr. Campbell provided the City of Raleigh with a financial analysis model that allowed the City to determine its current financial operational standing concerning its water and sewer utilities. The project also projected the impact on the City's financial position from proposed future Capital Projects and provided funding for these potential projects. This analysis model provided the City with a management tool that allows the City to consider several scenarios and test sensitivities for various growth scenarios and the timing and funding sources of anticipated capital projects.

Orlando Utilities Commission Evaluation of Regionalization Alternatives – City of Orlando, FL

Mr. Campbell served as Project Manager on the Evaluation of Regionalization Alternatives for the Orlando Utilities Commission (OUC), which focused on developing a regional plan for using reclaimed water to augment the withdrawal of groundwater by local water utilities. The analysis evaluated various system configurations relative to the City of Orlando's wastewater system to identify the most economically and fiscally prudent means of transporting 9.2MGD of reuse water to the Northwest Orange County area.

Financial Services – Laurens Commission of Public Works, SC

Mr. Campbell managed the development of a financial and rate analysis model for the electric, natural gas, water, and sewer utility operations of the Laurens Commission of Public Works (CPW) to assist the CPW Commission and staff in their ongoing evaluation of the present and projected financial status of the total CPW utility system operations and the stand-alone financial status of each of its four utility system operations. The model utilized recent historical and current budget data to project or forecast the cost of service or revenue requirements of each utility system operation for six years. The model results indicated the level of rate adjustments necessary to meet the total CPW revenue requirement and the cost-based revenue requirements of each utility system operation on a stand-alone basis. Since the CPW's operations and financial status are subject to scrutiny by outsiders who have a direct or indirect financial interest in the CPW's operations, annual revenue requirements are calculated based on both the minimum cash requirements established by the CPW's bond resolutions and rate ordinances and the regulated utility rate-base/rate-of-return method. The model also produced annual financial and operating ratios, which rating agencies rely on to evaluate the financial status of a municipal utility operation.



ZAK C. WRIGHT

Senior Manager

Mr. Zak Wright performs appraisals, depreciation studies, rate of return analysis, financial forecast analysis, financial analyses, and cost of service and rate design studies for electric, natural gas, water, and wastewater utilities. Before joining NewGen, he worked as a Commercial Credit Analyst and has experience in corporate finance, pro forma financial analysis, financial modeling, underwriting, banking, and strategic and capital planning. He attained his Master of Business Administration from the Massey School of Business at Belmont University. Mr. Wright is an Accredited Senior Appraiser (ASA), Machinery and Technical Specialties by the American Society of Appraisers, a Certified Depreciation Professional (CDP) by the Society of Depreciation Professionals, and a Certified Rate of Return Analyst (CRRRA) by the Society of Utility and Regulatory Financial Analysts.

CONTACT

49 Music Square West, Suite 505
Nashville, TN 37203
zwright@newgenstrategies.net
www.newgenstrategies.net

EDUCATION

Master of Business Administration,
Belmont University

Bachelor of Business Administration in
Finance, University of Tennessee
Knoxville

PROFESSIONAL REGISTRATIONS/ CERTIFICATIONS/COMMITTEES

Accredited Senior Appraiser (ASA) by the
American Society of Appraisers

Certified Depreciation Professional (CDP)
by the Society of Depreciation
Professionals

Certified Rate of Return Analyst (CRRRA) by
the Society of Utility and Regulatory
Financial Analysts

KEY EXPERTISE

Appraisals and Valuation

Contract and Formula Rate Review

Cost on Equity/Rate of Return Filings

Cost of Service and Rate Design

Depreciation Studies

Financial Feasibility Analysis

Financial Planning & Budgeting Models

Municipalization Feasibility Analysis

Power Supply Planning

Rate Benchmarking & Analysis

RELEVANT EXPERIENCE

Appraisals and Valuation

Mr. Wright has conducted valuations and fair market value appraisals to determine an indication of value for acquisitions/dispositions or to evaluate municipalization or privatization of utilities. His experience also includes service area valuations to assess compensation for decertification of areas covered by certificates of convenience and necessity.

Water and Wastewater Systems

- Abby Plantation DBA Louisiana Sewer Utilities
- Aqua Texas
- Bickerstaff heath Delgado Acosta LLP
- Canyon Lake Water Service Company
- Carteret County, NC
- City of Lawrenceville, GA
- Clifford, Ross, Raudenbush & Cooper, LLC, AZ
- Conrad Consulting & Training LLC, IN
- CSWR Texas – Carroll Water Company
- CSWR Texas – City of Ferris, TX
- CSWR Texas – Douglas Utility Company
- CSWR Texas – Lake Limestone Coves
- CSWR Texas – Leon Springs
- CSWR Texas – North Orange
- CSWR Texas – Northside Subdivision Water Plant and Distribution Corp.
- CSWR Texas – Patterson Water Supply
- Dentons Bingham Greenebaum LLP
- Gregg Law PC
- King George County Service Authority, VA
- Monarch I, LP – Woodland Oaks
- Nexus Water Group – Crystal Springs Water Company, Inc.
- Public Utility Commission of Texas
- Sands Anderson, PC
- Scurry County, TX
- SouthWest Water, Inc.
- Texas Water Utilities – Arroyo Doble Water System
- Texas Water Utilities – NextEra Water Texas
- Town of Lexington, SC
- York Water Company

ZAK C. WRIGHT

Senior Manager

Power Generation Assets

- CPS Energy, TX
- Greer, Herz & Adams, LLP, TX
- MWH America, Inc.
- Robbins Schwartz
- Somervell County Appraisal District, TX
- Williams Mullen

Hydro-electric Generation Assets

- City of Hamilton, OH
- Dentons Bingham Greenebaum LLP
- Hudson River-Black River Regulating District
- Walden Environmental Engineering

Coal Generation Assets

- Robbins Schwartz
- Rusk County Appraisal District, TX
- Shawnee Community Unit School District 84
- Tri-State G&T Association, CO

Power Distribution Assets

- City of Harrisonburg, VA
- Dairyland Electric Cooperative
- HDR – Bureau of Indian Affairs
- MWH Corporation, TN
- Middle Tennessee Electric Membership Corp

Oil Refining Facilities

- Greer, Herz & Adams, LLP, TX

Gas Assets

- City of Rockport, TX

Power Transmission Assets

- City of Abilene, TX
- Dairyland Power Cooperative, WI

Streetlight and Lighting Assets

- City of Killeen, TX

Waste-to-Energy Facilities

- City of Lisbon, CT
- Onandaga County Resource Recovery Agency, NY

Power Supply Contracts

- Basic Management, Inc., NV

Solar Assets

- Parker Gentry & Parker, Inc.

CCN Decertification

- Bickerstaff Heath Delgado Acosta LLP, TX
- Gregg Law PC, TX
- Lloyd Gosselink Rochelle & Townsend, PC
- Mustang/Marilee SUD, TX
- Public Utility Commission of Texas

ZAK C. WRIGHT

Senior Manager

Depreciation Analyses and Studies

Mr. Wright conducts and assists in Depreciation Studies to determine the estimated useful life span and depreciation parameters of utility assets. These studies include:

- Bryan Texas Utilities
- City Light & Power, WA
- CPS Energy, TX
- Kauai Island Utility Cooperative, HI
- Los Angeles Department of Water and Power, CA
- Lubbock Power & Light, TX
- New Braunfels Utilities, TX
- Tri-State G&T Association, CO

Cost of Service and Rate Design

Mr. Wright conducts and assists with wholesale and retail cost of service and rate design studies for electric distribution, natural gas distribution, and water and wastewater utilities to help them understand the operational and financial impacts of their residential and commercial services. These studies include creating wholesale and retail rate models in Microsoft Excel that are customized to meet the needs of each client. Many of these studies also included the creation of complex databases from Advanced Metering Infrastructure (AMI) datasets to support the wholesale and retail models. His clients include:

- City of Bonham, TX
- City of Gatesville, TX
- City of Justin, TX
- City of Lewisville, TX
- City of Mansfield, TX
- City of Marshall, TX
- City of Mt. Pleasant, TX
- City of Paris, KY
- City of Nicholasville, KY
- City of Niles, OH
- City of Springfield, MO
- Coachella Valley Water District, CA
- Corbin Utilities Commission, KY
- Fox Metro Wastewater Reclamation District, IL
- Princeton Electric Plant Board, KY
- South Toledo Bend Water District, Many, LA
- State of Louisiana – Office of Community Development
- Village of Greenport, NY
- Village of Orland Park, IL

Financial Planning & Budgeting Models

Mr. Wright develops comprehensive financial models to streamline utility rate design studies and determine the optimal level of funded debt and capital investment within various budget, usage, and customer base scenarios. His clients include:

- City of Charlottesville, VA
- City of Denton, TX
- Fayetteville Public Works Commission, NC
- City of Georgetown, KY
- Cleveland Public Power, OH
- Fairbanks Natural Gas / Interior Gas Utility, AK
- Kentucky Municipal Energy Agency, KY
- Neel-Schaffer, Inc. (City of Biloxi), MS

Rate Benchmarking

Mr. Wright benchmarks competitors' rates against the client's rates to determine costs based on several factors, including specific usage patterns and customer classes. He developed recommendations on the potential rate design. His benchmarking clients include:

- City of Bardstown, KY
- City of Nicholasville, KY
- CPS Energy, TX
- Mayfield Electric and Water Systems, KY

ZAK C. WRIGHT
Senior Manager

Rate Analysis

Mr. Wright analyzed the impact of fluctuating natural gas and funded debt prices on the economic viability of constructing a natural gas distribution system and utility in Alaska. He assessed the customer conversion rate and its impact on the utility's ability to deliver gas at a lower price. Mr. Wright also reviewed the rate for Cumberland River Southeastern Power Administration (SEPA) end-use customers. The assessment helped illustrate to the power administration that building a 50-year rate that included the cost of all potential capital improvement projects during that period would make the power unmarketable to these customers. This analysis helped encourage the power authority to incorporate a compromise true-up approach into their rate design.

- Cumberland River Southeastern Power Administration (SEPA) customers
- Stantec (Interior Gas Utility), AK

Municipalization Feasibility Analysis

Mr. Wright compiled demographic information from comparable municipal electric districts to approximate customer base, usage, and revenue information to support the client's investigation into forming a municipal electric system. He utilized the compiled data and the most recent incumbent utility's cost of service data to develop a financial model assessing the financial feasibility of this undertaking and its economic impact on the city and its residents. Mr. Wright's municipalization projects include:

- City of Spearfish, SD

Contract and Formula Rate Review

Mr. Wright reviews annual rate formulas to ensure they comply with settlement agreements between a group of municipal utilities and an investor-owned utility (IOU). He also verifies that settlement formulas and calculations that the IOU filed with the Federal Energy Regulatory Commission (FERC) accurately determined the monies due to the cities. Mr. Wright's clients include:

- City of Bardwell, KY
- City of Paris, KY
- Kentucky Municipal Group, KY
- City of Nicholasville, KY
- Kentucky Municipal Energy Agency, KY

Power Supply Planning

Mr. Wright reviews requests for proposal responses and develops a common-size expense model to determine the all-in cost of each respondent's proposal. He also supports the development of the project award recommendation. His projects include:

- City of Bardwell, KY
- Kentucky Municipal Energy Agency, KY
- Kentucky Municipal Group, KY
- City of Paris, KY

Franchise Fee Analysis

Mr. Wright developed a database to test the accuracy of franchise fee payments to a group of cities in Texas. He manipulated approximately 40GB flat file of raw data from discovery into models that tested for under-recovery for cities and provided defensible results.

- Lloyd Gosselink Rochelle & Townsend, PC



Tia Carnes

Senior Consultant

Ms. Tia Carnes joined the firm as a Consultant in February 2020. During her tenure, she has provided financial modeling, appraisal/valuation support, cost of service and rate design analyses, and most notably, support to the organizational review and workshop development projects. Her experience includes leadership training and development, team assessment, and financial analysis. Ms. Carnes came to NewGen with a strong background in customer service, logistics, and high-volume task management.

RELEVANT EXPERIENCE

Cost of Service and Rate Design

Ms. Carnes performs cost of service and rate design studies for electric, wholesale, and retail water, reclaimed water, wastewater, drainage, and natural gas utilities. She assists clients in understanding their service offerings' financial and operational impacts and develops rates intended to fully recover operating costs. Her clients include:

- City of Austin, TX
- City of Brea, CA
- City of Charlottesville, VA
- City of Coachella Valley, CA
- City of Corpus Christi, TX
- City of Henderson, KY
- City of Lewisville, TX
- City of Maryville, MO
- City of Orland Park, IL
- City of Springfield, MO
- City of Waco, TX

Organizational Effectiveness

Ms. Carnes conducts a high-level review of an organization to determine best practices, areas for improvement, and recommend solutions. Her contributions include analysis of survey results determining the organizational health of the client and facilitating workshops to build team skills and organizational effectiveness. Her clients include:

- City of Austin, TX
- City of Denton, TX
- CPS Energy, TX
- DEMCO, LA

Appraisals and Valuation

Ms. Carnes performs appraisal analyses to develop value indicators using the income, cost, and market valuation approaches. Her appraisal projects include:

Power Generation Assets

- Somervell County Appraisal District, TX
- Robbins Schwartz

Power Distribution Assets

CONTACT

225 Union Blvd., Ste 450
Lakewood, Colorado 80228
tcarnes@newgenstrategies.net
www.newgenstrategies.net

EDUCATION

Master of Business Administration,
Belmont University

Bachelor of Science in Bible/Biblical
Studies, Cairn University

KEY EXPERTISE

Appraisals and Valuation
Cost of Service and Rate Design
Financial Planning & Budgeting Model
Organizational Effectiveness
Rate Benchmarking & Analysis

TIA CARNES

Senior Consultant

- City of Harrisonburg, VA

Water and Wastewater Systems

- Town of Lexington, SC

Power Supply Contracts

- Basic Management, Inc., NV

Other Projects

Public Power Feasibility

- City of San Diego, CA

Facilities Rates Study

- City of Phoenix, AZ

Community Engagement

- City of Redding, CA



AIDAN OATES

Consultant

Mr. Aidan Oates joined NewGen in 2021, providing financial modeling, cost of service, and rate design assistance. His experience includes valuation, trading, economics, and investment banking specific to the Energy industry.

RELEVANT EXPERIENCE

Cost of Service and Rate Design

Mr. Oates works with NewGen project managers to build financial models for utility clients. These models utilize industry-standard cost allocation methodologies and allow clients to project their systems' operating, capital, debt service, and reserve requirements on both a short and long-term basis. Mr. Oates provides expert utility billing analysis to project utility revenues properly. Clients to whom Mr. Oates has provided these services include:

- Albemarle County Service Authority, VA
- Bloomington and Normal Water Reclamation District, IL
- City of Brea, CA
- City of Frederick, MD
- Coachella Valley Water District, CA
- Town of Barnstable, MD
- Township of Hamilton, NJ
- Town of Middleburg, VA
- Village of Orland Park, IL

PRIOR RELEVANT EXPERIENCE

Heikkinen Energy Advisors

Equity Research Associate

- Began the renewable energy equity research division by initiating coverage of several renewable companies operating in different industry subsectors.
- Built financial models to determine the inherent value of businesses operating in various renewable segments, including biomass production, sustainable utility generation, solar inverter manufacturing, battery distribution, and solar installation.
- Updated the models for mergers, acquisitions, debt and equity offerings, and general industry developments.
- Performed market research, valuation alterations, and quarterly report updates for publication.
- Created a system of comparing reporting across solar installation companies.

Thompson Financial Group

Financial Advisory Associate

- Balanced, designed, and reconstructed individual portfolios based on weighted risk tolerance considerations, market factors, and investment horizon.
- Led a team of new representatives to analyze modern sales trends and the effect of keyword marketing on specific territories within several archetypal Maryland markets.

CONTACT

900 Bestgate Road, Suite 402
Annapolis, Maryland 21401
aoates@newgenstrategies.net
www.newgenstrategies.net

EDUCATION

Master of Energy Management, Tulane University

Bachelor of Arts in English Literature and Finance, The College of William and Mary

KEY EXPERTISE

Cost of Service and Rate Design

Financial Planning & Budgeting Model

Renewable Energy Equity



ALEX ROBINSON

Consultant

Ms. Alex Robinson joined NewGen as a full-time Consultant in November 2023. She assists on cost of service and rate design projects, performing data evaluations and applying her financial modeling skills. Ms. Robinson's experience includes economic analysis and rate studies.

CONTACT

900 Bestgate Rd., Ste. 402
Annapolis, MD 21401
arobinson@newgenstrategies.net
www.newgenstrategies.net

EDUCATION

Bachelor of Arts in Political Science and
Economics, Johns Hopkins University

KEY EXPERTISE

Data Analysis
Financial Modeling
Cost of Service and Rate Designs

RELEVANT EXPERIENCE

Cost of Service & Rate Design – Water & Wastewater

Ms. Robinson assists with cost of service and rate design studies for water and wastewater utility clients. She conducts billing and usage analysis, as well as proforma development to project utility systems' operating expenses, capital investments, debt service, and revenue requirements. Ms. Robinson's financial forecasts, utility analyses, and bill comparisons provide her clients with an extensive overview of rate recommendations that promote successful budgeting and long-term growth.

Ms. Robinson's cost of service and rate design clients include:

- City of Maryville, MO
- City of St. Peters, MO
- City of Westminster, MD
- Town of Barnstable, MA
- Town of Ocean City, MD
- Township of Vernona, NJ
- United Water System, LA
- Village of Niles, IL
- Village of Northbrook, IL
- Village of Simpson, LA

PRIOR RELEVANT EXPERIENCE

ERC Data Analyst

Frost Law

- Verified and updated account source documents for the Employee Retention Credit, a COVID-response tax refund for small businesses.
- Input businesses' financial statements, payrolls, and loan forms into firm's database and Excel spreadsheets to calculate qualifications.
- Evaluated customers' ERC eligibility and produced summary reports for supervisor.
- Reviewed peers' data calculations for deficiencies to ensure group accuracy and efficiency.

NewGen
Strategies & Solutions



THANK YOU!



900 Bestgate Road, Ste. 402, Annapolis, MD 21401
Phone: (443) 951-4207
Email: ecallocchia@newgenstrategies.net
www.newgenstrategies.net