

Report
to the
City of San Diego
concerning
Electric and Gas Distribution Systems



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June 22, 2020

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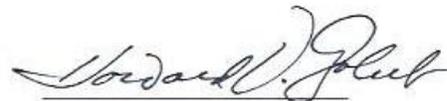
The Honorable Mayor
and
City Council
City of San Diego
City Administration Building
San Diego, California 92101

We are pleased to present this analysis and report to the City of San Diego.

This analysis considers two distinct paths for the City's energy future:

- Community ownership of the electric and/or gas distribution facilities within the City, and
- The terms and conditions of new electric and gas franchises to be granted, after a free and open bidding process to one or two qualified investor-owned utilities.

The City's decisions on the issues presented will have a profound effect on the future of the City. This report is intended to provide information to assist in that decision-making process.



JVJ Pacific Consulting LLC
by Howard V. Golub

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A. Summary and Recommendations

The City of San Diego (City) is presented with major decisions about its energy future as the franchises granted in 1970 for electric and natural gas service will expire in January of 2021. These decisions will be no less consequential than the City's decisions to adopt the Climate Action Plan and to implement Community Choice Aggregation.

In January 1970, 50 years ago, the City entered into two franchise agreements with the San Diego Gas & Electric Company (SDG&E) after several rounds of non-responsive bids by SDG&E. Because SDG&E was the only bidder, and because creation of municipal utilities was not then feasible, the City was forced to accept terms which it initially opposed. Those 1970 franchises expire on January 17, 2021. This presents the City with major opportunities but also difficult decisions.

The most fundamental decisions are:

1. whether to form a community-owned electric distribution utility and/or natural gas distribution system or,
2. to grant franchises for investor-owned utilities to provide electricity and/or natural gas, and if so, what terms and conditions for new franchises are in the best interests of the City and its residents and businesses.

Both questions are complex and involve policy, economic and legal-regulatory issues.

Our recommendation is that the City issue the proposed new franchises, described below, if approved by the City Council, for free and open competition by responsible bidders.

If the new proposed franchises are not accepted without material changes by a responsible bidder, then we recommend that the City proceed to form community-owned electric and gas distribution utilities.

The recommendations and background information are discussed in further detail below but may be summarized as follows.

New Franchises

San Diego is the largest city in the State of California where investor-owned electric and natural gas utilities can sell their services. This makes the City's electric and gas franchises extraordinarily valuable. The incumbent franchise holder earns approximately to \$322 million every year from operations within the City, after all expenses including franchise payments.

As a charter city, the City has broad discretion on the terms and conditions to be included in new franchises. However, the California Public Utilities Commission (CPUC) has jurisdiction over investor-owned utilities, including the level and design of their rates, their tariffs (such as interconnections, low-income rate relief, net energy metering and renewable energy feed-in) and their Greenhouse gas reduction, transportation electrification, energy efficiency, renewable energy, energy storage, microgrids and safety programs. In addition, the market reality is that qualified utilities will not accept a franchise if not profitable to them.

Experience has shown that the 1970 electric and natural gas franchises require revision to enable the City to exert effective oversight, enhance operational efficiency, eliminate ambiguity, provide a dispute resolution process and better align the utility with the City's goals and policies.

We have developed fair and balanced recommendations for the new franchise agreements based on our experience, analysis and:

- discussions with City leadership, operational personnel and the City Attorney's Office;
- input from stakeholders including residents, businesses, labor unions and other interested parties;
- review of current industry structure and regulatory requirements;
- review of other franchise agreements and
- consideration of comments of potential bidders on the new franchises.

It should be noted that the recommended electric and natural gas franchise agreements are intended to balance various considerations and individual parts should not be taken out of the context of the entire agreements.

We are recommending new franchises which:

- provide the City with reasonable compensation
- reduce electricity rates to City residents and businesses
- advance the City's Climate Action Plan and Community Choice Aggregation objectives
- create efficient mechanisms for operations by the City and the utility which should reduce operational costs and minimize litigation
- grant the utility permission to use the City's public ways to conduct its

businesses for a period of 20 years, and

- create safeguards including performance auditing and an enhanced right by the City to purchase the utility's facilities through a streamlined process at a fair price, if the City decides to do so at a future date

Franchises are permits to use the City's public streets and rights-of-way. They are a form of real property and the City can charge the franchise holder the reasonable value of the franchises. The City Charter requires that the grants of franchises be achieved through "free and open" competition.

City-owned Utilities

The City has a clear right under the California Constitution and under the City Charter to form electric and gas utilities to serve consumers both inside and outside the City. The issue before the City is whether it is in the best interests of the City and its residents to do so.

Community-owned electric utilities (including municipalities, utility districts, irrigation districts and tribal utility authorities) serve about one quarter of all electricity consumers in California. The two largest publicly-owned utilities, the Los Angeles Department of Water and Power (LADWP) and the Sacramento Municipal Utility District (SMUD), bracket SDG&E in size. Typically, community-owned utilities provide service at lower rates than investor-owned utilities.

In 1970, the consultant retained by the City studied the feasibility of the City acquiring all of SDG&E's electric, natural gas and steam facilities or only those portions within or very close

to the City’s boundaries. The consultant concluded: “Our analysis indicates that no acquisition is feasible due to the current high interest rates. It is conceivable that acquisition may become feasible in the future when and if interest rates are lowered, at which time re-examination may prove to be advisable.”¹ Today, interest rates are extremely low. However, interest rates are not the only relevant factor. Accordingly, in 2019, the City commissioned a team of well-qualified experts² to analyze the financial feasibility of creating City-owned electric and gas distribution utilities within the City’s boundaries.

The NewGen/Advisian/MRW team concluded that in the “Base Case” (the most probable of the various scenarios examined) the City-owned electric distribution utility is economically feasible . It was also feasible in the “Low Cost” scenario. However, in the “High Cost” scenario, the electric distribution utility is not economically feasible.

A special consideration applicable to a possible City-owned electric distribution utility is the fact that the City recently decided to participate in a Community Choice Aggregator, subsequently named San Diego Community Power (SDCP). Many of the considerations which led the City to participate in SDCP, such as the ability to advance the City Climate Action Plan objectives and more local control over the City’s energy future, would also apply to a City-owned electric distribution utility. The responsibilities of procuring an electric supply and the business risk are similar for SDCP and for a City-owned electric utility. The primary differences are that the electric distribution utility would also own and be responsible for maintaining the electric distribution facilities, would be responsible for billing and would obtain control of about \$121 million per year in State-mandated electric public purpose program which it could deploy

¹ Wilsey & Ham, June 12, 1970, transmittal letter, page 1.

² NewGen Strategies & Solutions, LLC, Advisian and MRW & Associates, LLC (NewGen/Advisian/MRW).

for projects directly benefitting City residents and businesses. In effect, SDCP is mid-way between monopoly SDG&E service and a City-owned utility. The City's Attorney's Office advises that if the City formed a utility, SDCP could not provide retail commodity electric service to customers within the City because of provisions in the statute creating Community Choice Aggregation.

NewGen/Advisian/MRW also analyzed the economic feasibility of a community-owned gas distribution utility. They concluded that in the "Base Case" the City-owned gas distribution utility would be economically feasible. They also found that a City-owned gas distribution utility would be economically feasible in all other cases studied.

A special consideration applicable to a possible City-owned gas distribution system is that it would give the City authority to operate the gas utility in a manner consistent with the Climate Action Plan. For example, the City could limit new gas hook-ups to essential purposes. In addition, the City would obtain control of approximately \$17 million per year in natural gas public purpose program charges which it could deploy for projects directly benefitting City residents and businesses.

Although there are cogent arguments in favor of developing community-owned electric and (especially) natural gas distribution utilities, we are not recommending that step now. In addition to the economic issues analyzed by NewGen/Advisian/MRW, implementing such a plan involves major policy and business issues, including the formation of a utility management team, recruitment of a qualified utility workforce and the commitment of senior City management and City Council time to the formation process, including the time required to acquire SDG&E's facilities.

If the City's only alternative was a continuation of the present franchises, we would recommend commencing the process of forming community-owned electric and natural gas utilities now.

However, the recommended new franchises should deliver major benefits to the City and its residents and businesses (including a reasonable minimum bid, decreased electric rates, enhanced sales tax revenues, access to unused utility property and possible utility support of the City's policy goals) and are faster and simpler to implement. The recommended franchises contain safeguards not present in the 1970 franchises, such as regular performance audits, Biennial Operating Permits, dispute resolution provisions and a powerful right to purchase the utility's facilities. Under the recommended new franchises, the City will have the information and the tools—particularly the right to purchase all or part of the utility's facilities within the City without a slow and costly condemnation process -- to form community-owned utilities in the future if it so chooses.

On the other hand, if the franchises contained in the City's Invitation to Bid are not promptly accepted by a responsible bidder without material change, the City should proceed with the formation of both electric and natural gas utilities, particularly as interest rates to finance such a project are at historic low rates, in dramatic contrast to the situation which existed in 1970.

B. Industry, Historical and Legal-Regulatory Overview

The recommendations and the proposed new franchise can best be understood in context.

1. 1970

In 1970, the City was unable to obtain the franchises it sought because municipal utilities were then financially infeasible and because SDG&E was the only bidder, giving it significant negotiating leverage over the City.

The City had studied whether it should issue electric and natural gas franchises starting in 1970 to replace franchises which had been granted in 1920. The consultant retained by the City in 1970 advised that it would have recommended the formation of City-owned utilities rather than the issuance of new franchises, except for the fact that high interest rates made that financially infeasible until interest rates are lowered.³ Accordingly, the consultant recommended issuance of new franchises.

On July 21, 1970, the City issued an Invitation to Bid (ITB) on franchises starting in 1970 to replace franchises which had been granted in 1920. The franchises attached to the ITB had a term of 10 years and franchise fees of 3%.

SDG&E was the only entity which responded to the ITB and it submitted a non-responsive bid. Among other things, SDG&E did not accept the 10 year term and responded that it sought perpetual franchises. The City rejected SDG&E's bids as non-responsive. After an additional cycle of an ITB and another non-responsive bid by SDG&E, the City issued a third ITB with modified franchises increasing the term from 10 years to 50 years.

³ Wilsey & Ham, June 12, 1970, transmittal letter, page 1. The interest rate set by the Federal Reserve Bank in January of 1970 was 8.97%, as compared with the current interest rate of 0.05% set in April 2020. Federal Reserve Bank of St. Louis, fred@stlouisfed.org.

The franchises attached to all of the ITBs provided for a franchise fee of 3% of gross receipts. SDG&E accepted the modified franchises including that provision, noting that it was subject to approval by the CPUC.

The City Council initially understood this condition to mean that SDG&E intended to obtain a Certificate of Public Convenience and Necessity (CPCN) from the CPUC, permitting SDG&E to exercise the franchises. On that basis, the City Council accepted the bid and granted SDG&E the franchises.

Shortly after the franchises were granted, the City Attorney and City Manager learned that SDG&E took the position that the condition applied not only to a CPCN but also for right to impose surcharges on electricity and natural gas consumers within the City based on the difference between average franchise fees and the 3% fee included in the franchises.⁴ The City Attorney informed the City Council which rescinded the grants. The City took the position that the proposed surcharges required a hearing before the CPUC. Those hearings were in fact held and the City objected to the proposed surcharge. SDG&E was successful before the CPUC in its request to impose surcharges⁵ and the City Council granted the franchises anew.

2. Industry Changes Since 1970

Changes since 1970 have increased the feasibility of both City-owned electric and natural gas distribution systems and of the possibility of competition for franchises.

⁴ These surcharges are sometimes referred to “differential surcharges”. For convenience this report will refer to “differential surcharges” as “surcharges”.

⁵ CPUC Decision 80234 (1972), *rehearing denied*, Decision 80636 (1972). The surcharges approved were 1.9% for electricity and 1.0% for natural gas.

In 1970, electric utilities were vertically-integrated monopolies which owned and operated all three components of the electric system: generation, transmission and distribution. Gas utilities did not typically own gas production but did own the gas transmission and distribution facilities to provide gas service to their end-use customers.

A new municipal electric utility or a potential bidder for the electric franchise would generally have had to own all three components (generation, transmission and distribution) to provide electric service. This would have required huge capital investment, particularly in generation.⁶

Similarly, a new municipal gas utility or potential bidder for the gas franchise would have had to own gas transmission and distribution facilities.

Due to changes in law and technology the situation today is radically different from 1970.

Currently, the majority of electricity produced in California comes from a robust independent power production industry, not from utilities. In fact, California utilities acquire most of their electricity by purchases from independent power producers and brokers. Transmission is available from the California Independent System Operator (created by California's 1996 Electric Utility Restructuring Act (AB1890)) which controls and operates the transmission lines of SDG&E, Pacific Gas and Electric Company (PG&E) and Southern California Edison Company (SCE) and others, on an "open access" basis. This means that municipal electric utilities and others have the right (guaranteed by federal and state law and regulations) to use transmission lines owned by SDG&E, PG&E and SCE to deliver electricity to

⁶ As a result, high debt service costs could cripple a new municipal electric utility.

their systems at just and reasonable rates regulated by the Federal Energy Regulatory Commission (FERC). Those factors make Community Choice Aggregators (created in 2002 by Assembly Bill 117) feasible, and the same laws and regulations would apply to a City-owned electric distribution system or to a potential bidder for the electric franchise.

Similarly, the CPUC, in the years since 1970, "unbundled" access to natural gas transmission pipelines which means that municipal gas distribution system or a potential bidder for the gas franchise could use those gas transmission facilities to deliver gas to a local distribution system. This means that a municipal gas distribution system can purchase natural gas from a distant supplier and have it delivered over an investor-owned utility's gas transmission pipeline system.

In 2005, a 1935 federal statute, The Public Utility Holding Company Act (15 U.S.C. §§ 79 *et. seq.*) which discouraged companies from owning more than one utility was effectively repealed. The effect of that change in law has been emergence of companies from outside of California which might be potential bidders for the City's franchises. It also facilitated changes in SDG&E. In 1970 SDG&E was a local utility. Today, SDG&E is a wholly-owned subsidiary of Sempra Energy, an international corporation which also owns other utilities in California and Texas and major investments outside the U.S. including liquified natural gas.

Advances in technology have also changed the industry. In 1970, the electric industry was characterized by large central fossil-fuel and nuclear generating plants (often in the range of 800 to 2,000 megawatts), requiring large amounts of capital to construct and maintain. Today, renewable energy is competitive with fossil fuel and nuclear energy, and solar energy is typically generated from much smaller generators. Distributed electric resources, including energy

storage, are becoming increasingly feasible and microgrids offer the possibility of low-cost renewable energy less subject to outages.

Technology has also changed the natural gas industry. Horizontal drilling combined with hydraulic fracturing ("fracking"), while highly controversial as to environmental impacts, has greatly increased the supply of natural gas, lowering prices and reducing the bargaining power of large purchasers such as traditional utilities.

3. California Utilities Today

In California today there are four large investor-owned electric or gas utilities and several ones with smaller operations in California.⁷ Investor-owned utilities are subject to pervasive regulation by the CPUC. Aspects of their activities are also subject to regulation by FERC.

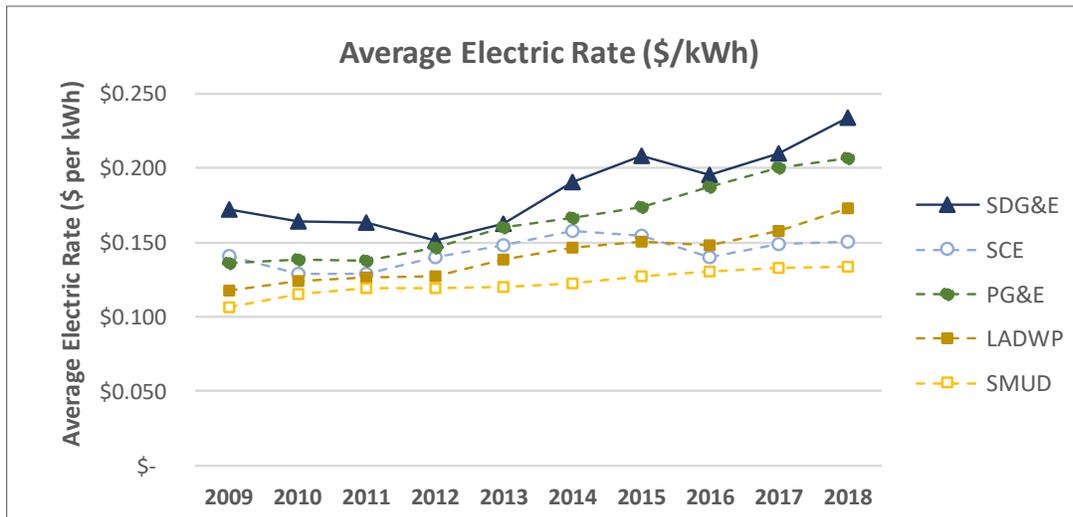
In addition, about 24% of California electricity consumers are served by community-owned utilities such as municipalities, utility districts and irrigation districts, all of which own and operate electric distribution facilities. The two largest in California are the Los Angeles Department of Water and Power (LADWP) with about 3,000,000 electricity consumers and the Sacramento Municipal Utility District (SMUD) with about 1,500,000 electricity consumers. If Community Choice Aggregators are added, well over half of all Californians receive their electricity supply from community-owned entities. However, focusing solely on community-owned utilities, they typically provide service at lower rates than investor-owned utilities.⁸

⁷ For example, PacifiCorp, a subsidiary of Berkshire-Hathaway Energy is a large utility, but its operations in California are far smaller than SDG&E's.

⁸ This is primarily due to the fact that investor-owned utilities obtain a profit on their capital whereas community-owned utilities commonly use long-term bonds. For example, SDG&E currently charges 10.2 % on its capital (after all expenses) (CPUC Decision 19-12-056 (2019), page 42) whereas for cities with Moody's ratings of Aa2 or S&P/Fitch ratings of AA rates are 2.55% for 30-year bonds (2.0% for 20 year bonds).

The average electric rates of the five electric utilities with the most customers in California are shown in Figure 1.

Figure 1
California Electric Utility Rates



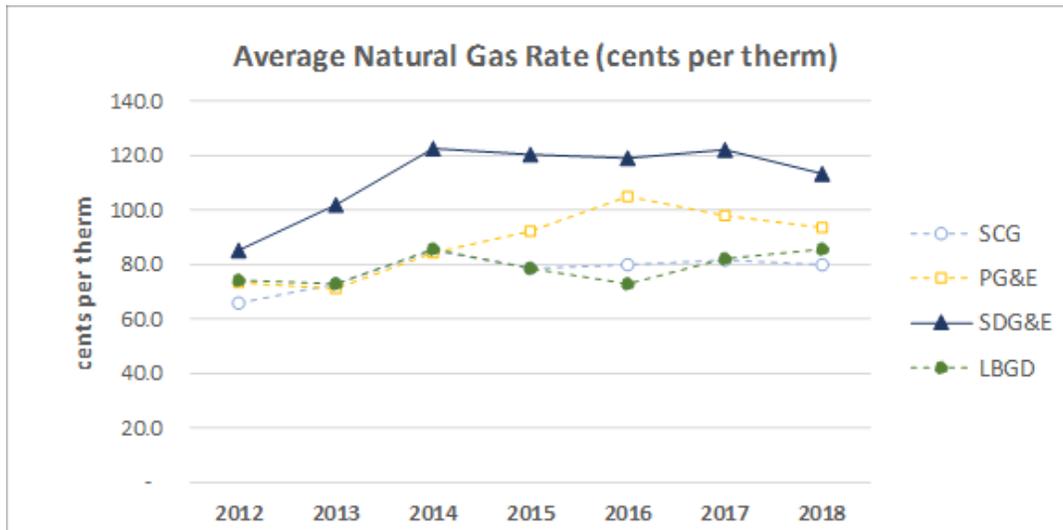
Source: U.S. Energy Information Administration forms EIA-861 and EIA-861S (www.eia.gov/electricity/data/eia861/)

Investor-owned utilities provide almost all of the natural gas distribution service in California. Southern California Gas Company (SCG), which is owned by Sempra Energy, sells slightly over 5 billion therms per year, and Pacific Gas and Electric Company (PG&E) sells over 4.5 billion therms per year. The next, SDG&E, is a distant third, selling about 490 million therms per year. The next largest gas utilities are smaller and community-owned. They are the City of Long Beach Gas Department (LBGD) at 90 million therms per year followed by the City of Vernon. Other community-owned gas distribution utilities⁹ are even smaller.

⁹ These include the cities of Coalinga, Palo Alto, Pittsburg and Susanville.

The rates for bundled service by four of the five largest gas distribution utilities¹⁰ are shown in Figure 2.

Figure 2
California Gas Utility Rates



Source: CPUC AB67 Annual Report to the Governor and the Legislature (https://www.cpuc.ca.gov/energy_reports/) ; City of Long Beach Comprehensive Annual Financial Reports (<http://www.longbeach.gov/finance/city-budget-and-finances/accounting/cafr/>); California Energy Commission data (<http://www.ecdms.energy.ca.gov/gasbyutil.aspx>).

Figure 2 shows that SDG&E’s natural gas rates are higher than the other three gas utilities. It is noteworthy that SDG&E rates are considerably higher than its Sempra-owned affiliate, Southern California Gas Company.

4. San Diego Gas & Electric Company Today

SDG&E currently holds both the electric and natural gas franchises granted by the City.

¹⁰ City of Vernon gas utility rates were not readily available for comparison. Vernon’s website states that it provides natural gas service “at some of the lowest rates in the State of California” www.cityofvernon.org/departments/public-utilities.

SDG&E has the highest electric rates of the five largest electric utilities in California (*see*, Figure 1) and the highest natural gas rates of the four largest gas utilities (*see*, Figure 2).

J.D. Power, a national rating agency, conducts an annual evaluation of electric utilities. It advised us that it does not release evaluations of utilities unless a subscription is requested by that utility. However, a J.D. Power August 7, 2019 report to the Board of Directors of SMUD which provides information about SDG&E is available online.

According to that J. D. Power report, SDG&E ranked below average in customer satisfaction among large electric utilities in the Western U.S.¹¹

Focusing solely on the five largest California electric utilities, and using a common measure of electric system outages, the System Average Interruption Duration Index (SAIDI)¹² for the period 2014-2018, the five electric utilities averaged the following number of minutes of outages per customer:

PG&E	133 minutes
LADWP	95.9 minutes
SCE	93.1 minutes
SDG&E	67.4 minutes

¹¹ J.D. Power “2019 Residential Customer Satisfaction Study”, Jeff Conklin Vice President, Global Business Intelligence, page 6. The average was 713, SDG&E scored 691, SMUD scored 770, SCE 726, PG&E 682 and LADWP 680.

¹² System Average Interruption Duration Index (SAIDI) is defined as the number of customers experiencing interruptions over 5 minutes, times duration of the interruptions (in minutes), divided by the total number of customers. This data excludes the impact of Major Event Days.

SMUD 61.9 minutes¹³

By the SAIDI measure, SDG&E had shorter average duration outages than the average for the five largest California electric utilities.

As of 2019, SDG&E had a higher percentage of renewable resources (44%) than Pacific Gas and Electric (39%) or Southern California Edison (36%).¹⁴

As with all California investor-owned utilities, SDG&E makes charitable contributions. The CPUC requires all utilities which it regulates to file an annual report of charitable contributions. These contributions might be made inside or outside their respective service territories.

In 2018, SDG&E reported charitable contributions of \$7,575,690.¹⁵

Also in 2018, Southern California Edison Company reported charitable contributions of \$20,397,503¹⁶ and Pacific Gas & Electric Company reported charitable contributions of approximately \$12,332,528.¹⁷

¹³ EIA Form 861 (<https://www.eia.gov/electricity/data/eia861/>).

¹⁴ CPUC Renewables Portfolio Standard Annual Report, November 2019, page 4. We are advised that SDG&E sometimes attempts to justify its high electric rates as the result of its high percentage of renewables procurement. It would require a separate study to definitively respond, but it is unlikely that the primary cause of SDG&E's high rates is actually the result of renewables procurement. This is because a utility's rates reflect not only generation costs (of which renewables are only a part) but also transmission and distribution costs. For example, a recent CPUC report found that renewables are only 16 % of SDG&E's total revenue requirements. CPUC 2020 Padilla Report, Costs and Cost Savings for the RPS Program, May 2020, page 12.

¹⁵ SDG&E Report Pursuant to CPUC General Order No. 77-M for the Year Ended December 31, 2018, pages 33 and 50. SDG&E has not yet filed its General Order 77-M report for 2019.

¹⁶ SCE Report Pursuant to CPUC General Order No. 77-M for the Year Ended December 31, 2018, page 111.

¹⁷ PG&E Report Pursuant to CPUC General Order No. 77-M for the Year Ended December 31, 2018, page 140. The total reported by PG&E was \$ 27,897,816. However, \$15,565,278 came from a foundation funded by the holding company which owns PG&E.

California investor-owned utilities support many charitable and other non-profit organizations, local business groups and advocacy groups. In addition they contribute to trade organizations and make political donations, none of which are included in the foregoing charitable contribution numbers. As a result of charitable contributions, trade organization memberships and political donations, investor-owned utilities build relationships which they can call upon to support them in various matters.

SDG&E is a wholly-owned subsidiary of Sempra Energy which reports “more than 35 million consumers worldwide.”¹⁸ Sempra also reported that, in 2019, it “delivered total shareholder return of 44% and increased its dividend by 8%”, being the 10th consecutive year of increasing dividends.¹⁹ In 2019 Sempra had gross income of almost \$11 billion and earnings of about \$2 billion.²⁰ The two top executives of Sempra Energy were paid a total of \$18,674,149 in 2018.²¹

Sempra Energy opposed Community Choice Aggregation for the City and is engaged in a program to perpetuate the use of natural gas despite concerns that it is inconsistent with the State’s and the City’s climate action objectives.²²

¹⁸ www.sempra.com

¹⁹ Sempra Energy 2019 Annual Report, Chief Executive Officer letter to shareholders.

²⁰ Sempra Energy 2019 Annual Report, page 9.

²¹ SDG&E Report Pursuant to CPUC General Order No. 77M for the Year Ended December 31, 2018, page 11. In addition, the former CEO was paid \$18,064,704 in 2018. Although the former CEO was the highest paid Sempra executive on the report, it probably included income related to retirement, so was not included above.

²² See, <https://www.kqed.org/science/1945910/socalgas-admits-funding-front-group-in-fight-for-its-future> and https://www.socalgas.com/sites/default/files/2020-02/SCG_VisionPaper_4.03.2019.pdf

SDG&E itself, with 3.6 million consumers²³ (about 10% of the Sempra total), had a 2019 gross income of \$4.3 billion²⁴ and net income of \$767 million²⁵ (about 38% of Sempra’s net income). The two top executives of SDG&E were paid a total of \$13,013,140 in 2018.²⁶

5. The Legal-Regulatory Framework²⁷

The City has considerable flexibility in establishing the terms of a new franchise, as it is a charter city. The California Constitution contains a “home rule” provision (Article XI, §5(a)) which confers on charter cities supremacy over “municipal affairs”. However, it should also be recognized that there are substantial constraints on the City’s authority in areas that are under the jurisdiction of the CPUC.

Under the California Constitution a “city...may not regulate matters over which the Legislature grants regulatory power to the” CPUC. Cal. Const. Art. XII, §8.

With regard to franchises the CPUC has attempted to balance these considerations. It has stated:

“We note that cities are empowered by California state law to charge public utilities franchise fees in exchange for the utilities’ use of public streets for distribution of gas, electricity, water or steam. We should not dispute the City’s authority or right to impose or levy a fee upon utility customers or the

²³ www.sempra.com

²⁴ <https://investor.sempra.com/static-files/68af0350-d99c-412c-af4f-aa8e6c8e2606>, page 56.

²⁵ Sempra Energy 2019 Annual Report, page 58.

²⁶ SDG&E Report pursuant to the CPUC General Order No. 77M for the Year Ended December 31, 2018.

²⁷ This is a general overview of the legal-regulatory framework pertinent to this Report. The City Attorney’s Office is the sole source for legal opinions pertinent to this Report, which does not express any legal opinions.

utility itself, which the City, as a matter of general law has jurisdiction to impose, levy, or increase. Thus, the amount of money the City charges as a franchise fee as well as the accounting of that money are decisions for the City and not this Commission.”²⁸

At the same time, the CPUC has made it clear that it has jurisdiction over utilities’ rates and practices.²⁹

While the CPUC does not generally attempt to intervene in franchise agreements it will probably do so if a franchise term appears to encroach upon an area which it regulates. For instance, the CPUC has long held that regulation of an investor-owned utility’s electric lines is within its exclusive jurisdiction. *See*, CPUC General Order 131 D, §XIV. B; CPUC Decision 88462 (1978) (city zoning ordinance empowering Planning Commission to require undergrounding held preempted by State law and CPUC regulation); *Southern California Gas Co. v City of Vernon*, 41 Cal.App. 4th 209, 211-212 (2d Dist. 1995) *reh’g denied*, 41 Cal.App. 4th 1523F (1996), *review denied*, 1996 Cal. LEXIS 1668 (1996) (“...the essential issue presented is whether Vernon can purport to regulate the design and construction of a proposed gas pipeline, notwithstanding the [CPUC’s] regulatory power in this area”, and holding that the city could not regulate such matters and was required, as a matter of law, to grant an encroachment permit).

²⁸ CPUC Resolution E-3788 (2002), page 7.

²⁹ *See* , CPUC Resolution E-3788 (2002), page 7 and CPUC Decision 89-05-063 (1989).

C. New Electric and Gas Franchises

The recommendations for the proposed new franchises are intended to maximize value to the City and its residents and businesses in a manner which complies with legal constraints and which offers sufficient value to a responsible bidder to accept the terms.

The value of the franchises fully justify the recommended terms. We encourage the City Council to review the recommended franchise provisions in their relation with the other provisions. Modifying, adding or removing provisions without careful consideration of the other provisions could result in an unbalanced franchise which could reduce the overall benefits to the City and its residents or become too burdensome for any potential bidder.

1. Term

We recommend to the City a proposed term 20 years for the new franchises.

Some community groups have recommended a much shorter term, such as 5 years, to preserve the City's future flexibility. However, a very short term would effectively eliminate competition for the new franchises because a new entrant would not be willing to expend the time and money to propose itself as an alternative to SDG&E. SDG&E would be aware of this market reality and drive the City to franchises on its terms, not the City's. For that reason, we recommend a term of 20 years for the proposed franchises. However, safeguards to prevent abuses by the utility over a 20-year term should be included in the proposed new franchises, such as the City's right to purchase the utility's facilities without having to go through a condemnation process, mandatory periodic performance audits, increased cost transparency in the undergrounding program and a biennial permit process.

On the other hand, some have argued for a term longer than 20 years. Obviously, that would provide the holder of the new franchises with the opportunity to profit over a longer period of time. However, we have not identified any public interest in an excessive term for the new franchises.

The argument has been made by SDG&E that a longer term is necessary for a utility to make necessary investments. This argument is invalid.

First, since the year 2000, SDG&E has known that it had 20 years remaining on its franchises. Did SDG&E not make adequate investments in the electric and natural gas distribution system within the City since 2000?

Second, utilities are required by the Public Utilities Code³⁰ and by the CPUC to make necessary investments to serve customers.

Finally, the current trend in utility franchises has been moving in the direction of shorter durations. For instance, in 2020, the National Renewable Energy Laboratory reported (based on a survey of 3,538 municipalities nationwide) that “Before 1995, many cities adopted franchise agreements with over 30 year terms” but “Since 1995, most cities have adopted 20 year contracts”.³¹ This data makes it clear that a 20-year term is reasonable for modern franchises.

³⁰ See, e.g., Pub.Util.Code § 451.

³¹ Webinar presentation on Municipal Franchise Agreements (presented by J. Cook, National Renewable Energy Laboratory, hosted by the National League of Cities), <https://www.nrel.gov/solar/municipal-franchise-agreements.html>

In California, most utility franchises were entered into decades ago when circumstances were radically different. For example, the City and County of San Francisco electric franchise was signed in 1938. Moreover, many utility franchises in California are perpetual. For instance, of the 32 franchises held by SDG&E, 27 are perpetual. For that reason, only a few new utility franchises have been issued in the last two decades. Fifteen years ago, the City of Chula Vista issued new electric and natural gas franchises for a term of 10 years plus a 20 year renewal upon the satisfaction of certain conditions. Ten years ago, San Bernardino County issued an electric franchise for 30 years, the City of Fresno granted a gas franchise for 50 years and the City of Huntington Beach granted a gas franchise for 25 years.

Given the limited California precedents, we also looked at franchises issued by large cities elsewhere in the country. Chicago entered into an electric franchise in 1992 for 28 years. Denver entered into electric and gas franchises in 2007 for 20 years. Portland entered into electric and gas franchises in 2007 for 20 years. Dallas entered into electric and gas franchises in 2009 for 15 years. Phoenix entered into a gas franchise in 2019 for 24 years.

For these reasons, a 20-year term balances several factors. Together with the other recommended provisions, it provides the City with the ability to revise the terms as warranted by future conditions. It is of sufficient duration to encourage free and open competition for the franchises. It also provides the successful bidder with a substantial time period to earn a profit and motivation to make investments.

2. Compensation to City

As the California Supreme Court has long stated and recently confirmed, a utility franchise is a “privilege” to use public streets or rights-of-way to provide services to residents within the governmental entity’s jurisdiction.³² In other words, a utility does not have a “right” or entitlement to use a city’s streets for its business. A charter city may, under California law, charge a fee which bears reasonable relationship to the value of the property interests transferred by the franchise.³³

San Diego is the largest city in the State of California where investor-owned electric and natural gas utilities can sell their services.³⁴ This makes the City’s electric and gas franchises extraordinarily valuable. The incumbent franchise holder earns about \$322 million every year from operations within the City, after all expenses including franchise payments.

Historically, the City (and many other California cities) have been underpaid with respect to franchises. Many franchises were issued 50 to 70 years ago. Most cities were ill-informed on utility matters and incapable of understanding the issues and/or unable to resist pressure by well-funded utilities. In addition, in previous decades, cities had no practical alternative to service by the incumbent monopoly utility which controlled all aspects of electricity and natural gas businesses. Most cities ended up accepting perpetual franchises with no opportunity for updating. Moreover, general law cities are restricted by statute to a franchise fee of 1% of gross receipts

³² See, *Jacks v. City of Santa Barbara*, 3 Cal. 5th 248 (2017), and *Spring Valley W.W. v. Schottler*, 62 Cal. 69 (1882)

³³ See, *Jacks* case above.

³⁴ San Diego is the largest City in California which currently grants a franchise to an electric investor-owned utility because the City of Los Angeles owns and operates a municipal electric utility. Electricity franchises yield far higher revenues to investor owned utilities than natural gas franchises. However, even as to natural gas franchises, San Diego is the second largest city in California (and the 8th most populous city in the nation) so the City’s gas franchise is also highly valuable.

within their jurisdiction.³⁵ Those few charter cities which have had an opportunity to revise their franchises in recent years have struggled to obtain reasonable compensation. However, they did not have the resources of the City of San Diego.

The largest city in PG&E's service territory is San Jose. The City of San Jose granted a perpetual franchise to PG&E in 1971 with an initial franchise fee of 1% but with a "most favored nation" clause permitting adjustment pursuant to a formula if PG&E paid a higher fee to other cities. After considerable effort and controversy with PG&E, the fee was adjusted and today is 2%.

The largest city in SCE's service territory is Long Beach. In 1971, the City of Long Beach granted SCE a 60 year electric franchise to SCE but with a termination and right to purchase clause. Around 1999, Long Beach expressed an interest in exercising its right to terminate the franchise and purchase the SCE electric distribution system within Long Beach. In 1999, after some controversy, SCE and Long Beach entered into an agreement where the City would not exercise its right to terminate for 10 years in return for a \$14 million upfront payment (\$5 million in cash plus a 10-story office building valued at about \$9 million) plus certain other benefits. The annual franchise fee payment of (approximately \$3.6 million in 1999) under the 1971 franchise would also continue to be paid. In fact, it was increased from 1.4% to 1.66%.

Looking at large cities outside of California (where general law cities are restricted to a 1% franchise fee and perpetual franchises are prevalent) we find substantially higher than 1% franchise fees. Chicago entered into an electric franchise in 1992 with a 4% franchise fee,

³⁵ Under the Franchise Act of 1937 (Pub. Util. Code §§ 6231-6235), two formulas are available for general law cities, but the 1% formula typically yields the higher revenues.

Denver entered into an electric franchise in 2007 with a 3% franchise fee, and Portland entered into an electric franchise in 2007 with a 5% franchise fee.³⁶

With this general background in mind, we can assess the compensation to the City recommended for the new franchises.

a. Annual Franchise Fee

The 1970 electric franchise fee of 3% would remain unchanged.

The electric franchise fee is, by far, the largest portion of the franchise payments by SDG&E to the City. For the year 2019, the annual electric franchise fee amounted to \$57,788,993.³⁷

The 1970 natural gas franchise fee of 3% would be increased by ½% to 3.5%.

For the year 2019, SDG&E paid \$7,414,462 in gas franchise fees (not including the statutorily mandated fee under Public Utilities Code §6353). Assuming that gross receipts are approximately the same in 2021, the incremental 0.5% would result in an increase in revenue to the City of about \$1,235,000. It is anticipated that the successful bidder on the new franchises would apply to the CPUC to add the 0.5% to the existing 1.0% surcharge on natural gas sales authorized by the CPUC in 1972. The City could utilize the additional funds to support programs

³⁶ Dallas entered into an electric franchise in 2009 using a formula (\$/kWh) which is difficult to compare to the City's proposed new franchises.

³⁷ Both the electric and natural gas franchise fees payable to the City include the fees set forth in the franchises plus a statutorily required fee set forth in Pub. Util. Code § 6353.

to advance the Climate Action Plan, but because the funds would be deposited in the general fund, they could be used in any manner.

b. Minimum Bid

We recommend that, as part of the Invitation to Bid, the City set a Minimum Bid equal to one year's franchise fee and that the Minimum Bid be paid out of utility shareholders' funds and not charged to utility ratepayers.

Because franchise fees vary from year-to-year, we recommend the use of the average of the last five years, 2015-2019. For the electric franchise, the five-year average is \$54,239,489. For the natural gas franchise, the five-year average is \$7,864,830. For administrative convenience, we further recommend rounding the Minimum Bid to \$54,000,000³⁸ and \$8,000,000³⁹, respectively. This is equivalent to \$3.1 million per year over the 20-year term of both of the recommended franchises.

The recommended Minimum Bid amount is:

- less than 5% of the typical rent charged by the City on long-term business leases; in other words, 95% of the rent typically charged other City business tenants would not be charged to the utility
- less than 1% of the \$6.4 billion net income opportunity granted by the franchises;

³⁸ Using the 5-year average and rounding approach results in a recommended Minimum Bid number about \$1.8 million less than the actual annual electric franchise fee collected in 2019.

³⁹ Using the 5-year average and rounding approach results in a recommended Minimum Bid number about \$ 443 thousand less than the actual annual natural gas franchise fee collected in 2019.

in other words, the utility would retain 99% of the net income opportunity

- One-seventh of a 1% increase in annual franchise fee payments
- 22% of the amount indicated by SCE's electric franchise extension payment to the City of Long Beach

The basis for these numbers are discussed below but, by any measure, the recommended Minimum Bid amounts are quite reasonable when compared to the value bestowed. In fact, the question arises whether the Minimum Bid should be set higher than the recommended amounts; that is also discussed below.

As noted above, the California Supreme Court has made it clear that, in granting a utility the privilege to use a city's streets and rights-of-way, a charter city is entitled to charge a fee which is a reflection of the value of the franchise.

A grant of 20-year electricity and natural gas franchises by the City of San Diego is the grant to a profit-making, investor-owned utility the opportunity to make over \$6.4 billion in profit.⁴⁰

That \$6.4 billion profit is net of all expenses, including franchise fees paid by the utility and is a persuasive indicator of the value of the franchises.

⁴⁰ SDG&E's net reported income in 2019 was \$767 million. *See*, Sempra Energy 2019 Annual Report, page 58. MRW & Associates, which has assisted the City on SDG&E rate matters for many years, advises that approximately 42% of SDG&E's rate base is within the City and therefore reasonable to assume that 42% of SDG&E's revenues derive from sales within the City. \$767 million at 42% equals \$322 million. \$322 million per year for 20 years equals \$6.44 billion. All of these numbers are without adjustments for inflation, changes in usage or increases in utility rates, nor are they adjusted for present value.

That \$6.4 billion profit far exceeds the recommended \$62 million. In fact, the recommended Minimum Bid is slightly less than one percent of the value of the franchises granted.

Determining the value of the franchises is critical. If they are valued too low, the City and its residents and businesses will be denied critically-needed revenues to provide essential services. On the other hand, if the franchises are valued too high, that would discourage responsible bidders from submitting responsive bids to the ITB.

There are several criteria which are relevant to the determination of the value of the franchises. These are discussed below.

i. Long-term Business Lease Value

The franchises are similar to long-term leases and one method of determining the value of these franchises is to look at long-term business leases.

We have been informed that, in situations where the City is the landowner it often charges rent which is between 6 and 8 % per year of the gross receipts generated by the business.

The gross receipts by the utility holding the electric franchise is projected to be approximately \$32.8 billion for a franchise with the recommended 20-year term.⁴¹

⁴¹ The gross receipts for electricity collected by SDG&E within the City in 2019 was \$ 1,637,838,721. Over the recommended 20-year term that would result in gross electric receipts to the utility from sales within the City of \$32,756,774,420. All of these numbers are without adjustments for inflation, changes in usage or increases in utility rates, nor are they adjusted for present value.

Viewing the franchise as analogous to a long-term business lease, 7% of \$32.8 billion would result in a value of \$2.3 billion. However, in using this method, the annual franchise payments of \$1.1 billion over the recommended 20-year term should also be considered.⁴²

That would result in a Minimum Bid amount of \$1.2 billion for the electric franchise.⁴³

The gross receipts by the utility holding the natural franchise is projected to be approximately \$4.9 billion for a franchise with the recommended 20-year term.⁴⁴

Using the same method as described above for the electric franchise, this would result in a Minimum Bid amount of \$174 million for the natural gas franchise.⁴⁵

ii. Net Income Value

The net income of the electricity and natural gas franchises to conduct business within the City represent the opportunity to make over \$6.4 billion in profit, after expenses including the annual franchise fees.

⁴² The gross receipts for electricity sold within the City over the recommended 20-year term is projected to be \$32.8 billion. Using the mid-point of the City's established approach for long-term business leases of 6%-8% (*i.e.*, 7%), that would equate to \$2.3 billion. That number, however, should be reduced by the annual electric franchise fees paid to the City. In 2019 the annual electric franchise fee was \$ 55,740,830. Over the recommended 20-year term that would equate to \$1,114,816,600. \$2.3 billion minus \$1.1 billion equals \$1.2 billion. All of these numbers are without adjustments for inflation, changes in usage or increases in utility rates, nor are they adjusted for present value.

⁴³ *See*, footnote 40.

⁴⁴ The gross receipts for natural gas collected by SDG&E within the City in 2019 was \$ 247,148,728. Over the recommended 20-year term, natural gas gross receipts are projected to be \$4.9 billion. All of these numbers are without adjustments for inflation, changes in usage or increases in utility rates, nor are they adjusted for present value.

⁴⁵ The gross receipts for natural gas sold within the City over the recommended 20-year term is projected to be \$4.9 billion. Using the mid-point of the City's established approach for long-term business leases of 6%-8% (*i.e.*, 7%), that would equate to \$343 million. That number, however, should be reduced by the annual natural gas franchise fees paid to the City. In 2019 the annual natural gas franchise fee was \$8,443,153. Over the recommended 20-year term that would equate to \$168,863,060. \$343 million minus \$169 million equals \$174 million. All of these numbers are without adjustments for inflation, changes in usage or increases in utility rates, nor are they adjusted for present value.

The question presented under this method is what is the value of an opportunity to earn \$6.4 billion?

Assuming that the value is 1% of the \$6.4 billion, the Minimum Bid would be \$64 million. Obviously, the Minimum Bid amount would increase if the value is more than 1%.

iii. Annual Franchise Fee Value

Another method of looking at the value of the franchise is to look at the annual franchise fee as a starting point. On the electric franchise, in 2019, the City collected \$55,740,830 on a 3% annual fee. A Minimum Bid equivalent to a 1% annual fee would be about \$18.6 million per year, or \$372 million for the recommended 20-year term of the electric franchise.⁴⁶

On the natural gas franchise, in 2019, the City collected \$8,443,153 on a 3% annual fee. A Minimum Bid equivalent to a 1% annual fee would be \$2,814,384 per year, or about \$56.3 million for the recommended 20-year term of the natural gas franchise.⁴⁷

A utility which won the bid would probably much prefer that the annual franchise fee be increased from 3% to 4% instead of a Minimum Bid. This is for the very simple reason that the utility would then seek to impose that cost on residents and businesses within the City through a surcharge. The mechanics of utility surcharges are discussed below (*See, C.3*) but the essential point here is that they increase costs to consumers within the City.

⁴⁶ All of these numbers are without adjustments for inflation, changes in usage or increases in utility rates, nor are they adjusted for present value.

⁴⁷ All of these numbers are without adjustments for inflation, changes in usage or increases in utility rates, nor are they adjusted for present value.

The recommended form of Minimum Bid, by way of contrast, would require the utility to absorb that cost.

While the utility would, obviously, prefer to keep the money for itself, requiring that the Minimum Bid be paid by the utility would not impose a meaningful burden on the utility.

For example, in 2019, the incumbent franchise holder, SDG&E, had an annual gross income of \$4.3 billion⁴⁸ and net income after all expenses (including franchise fees) of \$767 million.⁴⁹ Even though it only serves about 10% of Sempra's customers, in 2019 it provided about 38% of Sempra's net income. That, no doubt, played an important role in allowing the Chief Executive Officer of Sempra to state that, in 2019, Sempra “delivered total shareholder return of 44% and increased its dividend by 8%”, being the 10th consecutive year of increasing dividends.⁵⁰ This also allowed generous pay packages for executives. For example, the two top executives of the incumbent utility received compensation of \$13,013,140 in 2018 (the last year SDG&E filed its annual salary report with CPUC).

iv. City of Long Beach Experience

As noted above, the City of Long Beach is the largest city in SCE's service territory. SCE's conduct when confronted with possible termination of the Long Beach electric franchise sheds light on the value of the City of San Diego franchises.

⁴⁸ See, footnote 23.

⁴⁹ See, footnote 25.

⁵⁰ Sempra Energy 2019 Annual Report, Chief Executive Officer letter to shareholders, emphasis added.

Around 1999, Long Beach expressed an interest in exercising its right under its franchise with SCE to terminate the franchise and purchase the SCE electric distribution system within Long Beach. At that point, the franchise had about 30 years remaining.

In 1999, to avoid the termination of the franchise, SCE entered into an agreement with Long Beach whereby Long Beach would not exercise its right to terminate for 10 years in return for an upfront fee of \$14 million plus certain other benefits. The annual franchise fee payment of (approximately \$3.6 million in 1999) under the franchise would also continue to be paid. The upfront fee was 3.9 times the annual franchise fee paid to Long Beach.

In other words, SCE placed a value of 3.9 times the annual fee on continuing the franchise for a guaranteed period of 10 years.⁵¹

If the City were to use the Long Beach model, it would require an up-front fee of approximately \$217.2 million for the electric franchise⁵² and an up-front fee of approximately \$32.8 million for the natural gas franchise.⁵³

The Long Beach experience is noteworthy because it involved a large city (albeit not as large as San Diego) and a utility facing loss of a franchise.⁵⁴

⁵¹ Alternatively, it could be looked at as a way of preserving the remaining 30 years of the franchise, but after the 10 year period, SCE would be at risk that Long Beach would again exercise its right to terminate and purchase under its franchise agreement.

⁵² In 2019, the electric franchise fee paid by SDG&E was \$55,770,830, including the statutorily required fee set forth in Pub. Util. Code § 6353. \$55.7 million times 3.9 equals \$217.2 million.

⁵³ In 2019, the natural gas franchise fee paid by SDG&E was \$8,443,153, including the statutorily required fee set forth in Pub. Util. Code § 6353. \$8.4 million times 3.9 equals \$32.8 million.

⁵⁴ Another way to look at the Long Beach situation is as follows. Adjusted for inflation, the \$14 million paid by SCE in 2000 for a 10 year extension of the electric franchise is approximately \$21 million in today's dollars. Taking into account the fact that the population of San Diego is slightly more than three times that of Long Beach, the equivalent of the \$21million (2020 dollars) up-front fee paid to the City of Long Beach is equivalent to about \$63 million for only the electric franchise for the City of San Diego.

v. Should the Minimum Bid be Set Higher than the Recommended Amounts ?

The question might also arise, given that a charter city may charge for a franchise based on its reasonable value, and that the value of the franchises for the City of San Diego is in the billions of dollars, whether a higher Minimum Bid than the amounts recommended should be established.

A significant increase in the Minimum Bid about the recommended amounts would be reasonable but it also has a drawback. The City Charter calls for a "fair and open" bidding process. Not only is that a legal requirement, but competition is to the City's advantage particularly as any incumbent without competition over a long period tends to become complacent and less concerned about providing high quality service at a reasonable price.

Therefore, the recommendation is to set the Minimum Bid at level which would not discourage competition. The recommended Minimum Bid is just that: a minimum. Bidders are free to increase their respective bids above that amount and if two responsible bidders submit otherwise identical bids, we recommend that the responsible bidder which offers the highest amount be awarded the franchise.

At the same time, we strongly advise against a nominal Minimum Bid amount. That was a mistake made by the City in 1970.⁵⁵ The reality of the City's situation is that it has a valuable asset but the pool of potential responsible bidders is small. Bidders know this and it is highly likely that potential bidders will try to "game" the system. If a substantial Minimum Bid is not set, the City runs the risk of a bidder obtaining the franchises at far less than their value.

vi. Minimum Bid Payment Methods

⁵⁵ Although it was a mistake, it is understandable. In 1970, due to high interest rates, a community-owned utility was not feasible and, due to the legal-regulatory framework (which has since changed) , the only bidder was SDG&E.

We further recommend that the Minimum Bid be paid as follows at the election of the utility, upon commencement of operations under the new franchises, either: (a) in full or (b) in installments, with interest, spread over a period not to exceed ten years.

vii. Minimum Bid Should be Paid by Utility

Whichever payment method is elected, we strongly recommend that the Minimum Bid should be paid out of utility shareholder funds and not charged to ratepayers.

c. Other Compensation

The recommended new franchises will contain a number of improvements over the 1970 franchises. These improvements are designed to deliver significant value to the City and its residents and businesses at little or no incremental cost to the franchises holder(s).

First, we recommend that all purchases by the utility should be made subject to the City's sales tax. The utility would continue to purchase from suppliers of its own choice, wherever located and delivered to wherever the utility deems appropriate. It should not materially change the utility's total sales tax liability. However, the change should ensure that the City receives those revenues.⁵⁶ Given the large volume of purchases by electric and natural gas utilities this should result in substantial revenue to the City.

Second, we recommend the City have the right to use unused space on utility infrastructure such as poles, trenches, conduits etc. at no cost to the City. This shall include the right to install Wi-Fi transmitters and receivers. However, the City would be required to comply

⁵⁶ This is similar to the arrangement the City of Long Beach created with the SCE in 1999.

with applicable safety requirements and not interfere with the utility's use of the poles, trenches, conduits, etc.

Third, we recommend that, at no charge by the utility to the City or its residents and businesses, unused utility real property within the City be made available for City use as mini-parks, community gardens, parking city vehicles, or other purposes designated by the City which do not conflict with the utility's core function of serving electricity and natural gas.

Finally, we recommend that the City will have the right of first refusal to purchase utility real property within the City put up for sale.

3. Surcharges Imposed on San Diego Residents and Businesses

It is recommended that the new franchises contain provisions seeking to reduce electricity and natural gas rates charged to residents and businesses within the City.

a. Eliminate 0.35% of the Electricity Surcharge Imposed on San Diego Residents and Businesses

As explained above at Section B.1, in 1972, SDG&E requested the CPUC to impose “surcharges” on electricity and natural gas rates within San Diego, to be added to the general rates which SDG&E charges all its customers.⁵⁷ The City objected but the CPUC ruled in favor of SDG&E.⁵⁸

⁵⁷ The general rule in utility ratemaking is that franchise fees are included in rates spread over all of the customers of the utility.

⁵⁸ CPUC Decision 80234 (1972). This surcharge is different than a surcharge established thirty years later to fund enhanced undergrounding within the city.

The basic logic behind the surcharge was that the 3% franchise fees established in the 1970 franchises were higher than the average franchise fees paid by SDG&E.⁵⁹ The CPUC's 1972 findings might be summarized as follows:

	City of San Diego Franchise Fees	SDG&E 1972 Average Franchise Fees	Surcharge on San Diego Residents
Electricity	3%	1.1%	1.9%
Natural Gas	3%	2%	1%

In 2002, the electricity surcharge was increased from 1.9% to 2.25% as a result of an agreement between SDG&E and the City, approved by the CPUC,⁶⁰ an increase of 0.35%.

The 2002 agreement resolved two issues. First, SDG&E and the City agreed that undergrounding within the City should be accelerated beyond that funded by SDG&E's Rule 20 on file with the CPUC by the creation of a Utility Undergrounding Program (UUP) specific to the City. That program would be funded by a surcharge of 3.53% on electricity rates.

Second, at that time, there was a dispute between SDG&E and the City over the question of whether the revenue derived from the 1972 surcharges should be included in "gross receipts" which is used to compute the annual franchise payment. Since 1972, SDG&E had been including the 1972 surcharges in "gross receipts". Around 1990, SDG&E changed position and refused to include them in "gross receipts", effectively reducing the amount paid to the City. That dispute would have been exacerbated by the new UUP surcharge. Therefore, in the 2002 agreement,

⁵⁹ CPUC Decision 80234 (1972); *see, also*, CPUC Decision 89-05-063 (1989).

⁶⁰ CPUC Resolution E-3788 (2002). This reflected the 2002 agreement between SDG&E and the City.

SDG&E and the City agreed that both the 1972 surcharge and the UUP surcharge would be included in "gross receipts".

It is questionable whether the 2002 agreement and CPUC Resolution E-3788, which was based on that agreement, would apply to a new franchise.⁶¹ However, for the avoidance of doubt, it is recommended that the new electric franchise contain language designed to eliminate the 0.35% electricity surcharge in the future.

Eliminating the 0.35% surcharge should save electricity consumers within the City approximately \$5.5 million per year. Over the recommended 20 year life of the new electric franchise, that would be a savings to City residents and business of over \$ 110 million.⁶²

It should be noted that the City will lose some franchise revenues as a result of the recommended change. Because the revenue received by SDG&E from the 0.35% is included in the "gross receipts" used for calculating the 3% annual franchise fee, the utility's annual franchise fee payment would be reduced by approximately \$165,000 per year, or \$3,300,000 over the recommended 20 year period.⁶³ Despite the adverse impact on the City's revenues, we recommend the elimination of the 0.35% surcharge, because of the benefits to the City's residents and businesses.

⁶¹ The 1.9% surcharge established in 1972 and the 3.53% UUP surcharge would both be unchanged by this provision. However, the updating mechanism described below might result in reduction of the 1.9% surcharge in the future. Moreover, it is recommended that nothing in the recommended franchises prevent the City from requesting the CPUC to reduce the 1.9% surcharge.

⁶² This is without adjustment for inflation, changes in usage or increases in utility rates nor is it adjusted for present value. Inflation and increases in usage and/or utility rates would increase the number of dollars.

⁶³ See, footnote 47.

In evaluating this recommendation, the City should also be aware that the adverse impact on City franchise revenues could be higher than described above. For instance, the utility might attempt to circumvent the intended 0.35% surcharge elimination by various arguments at the CPUC, including the possible argument that "gross receipts" should not include any of the remaining surcharges (*i.e.*, the 1972 1.9% electric surcharge and the 2002 3.53% UUP surcharge). If this argument was successful it would significantly reduce the City's franchise revenues even further than the \$165,000 per year. In that scenario, the City's franchise revenues would be reduced by almost \$6 million per year or \$120 million over the recommended 20 year period.⁶⁴ Obviously, this is a major risk to the City's revenues. However, because of the benefits to the City's residents and businesses, we recommend that the City accept this risk, but mitigate it by language in the new franchises prohibiting the utility from excluding the remaining surcharges from "gross receipts" and, if necessary, appropriate action at the CPUC and/or in the courts.

b. Updating Mechanism to Potentially Reduce Future Surcharges

We also recommend an updating mechanism. The surcharges were based on data which is 50 years old. Since then other communities have imposed various charges on utilities.

Therefore, we recommend requiring the utility to provide a detailed biennial report comparing franchise fees (as defined by the CPUC⁶⁵) and to promptly file a request with the CPUC to adjust the surcharges to City residents and businesses if supported by the facts.

⁶⁴ See, footnote 47

⁶⁵ See, CPUC Decision 89-05-063 (1989). This includes a variety of charges such as a Utility Users Tax which the City does not charge.

Because the City continues to encourage undergrounding of electric facilities, we do not recommend a change to the 3.53% surcharge in support of the Utility Undergrounding Program (UUP).⁶⁶ Should the City wish to accelerate or to scale down the UUP, then the surcharge related to UUP should be adjusted accordingly.⁶⁷

4. City Policy Objectives

Utility operations can have a significant impact, for better or worse, on City policy objectives, such as implementation of the City's Climate Action Plan.

We recommend that the new franchises require the utility to have a corporate officer consult with a designated representative of the City at least annually to develop a Joint Policies Guide that shall, at a minimum, address through practical and reasonable steps, ways for the utility and City to effectuate, to the best of their abilities and subject to CPUC regulation and applicable laws, the GHG reductions established within the City's Climate Action Plan with an emphasis on equity and environmental justice for communities of concern.

We recommend this review include good faith consideration by the utility of a petition to the CPUC to permit the City to manage certain public purpose charges already paid by the electricity and natural gas consumers within the City. The Electric Program Investment Charge (EPIC) is mandated by CPUC orders⁶⁸ and the natural gas public purpose program charges are

⁶⁶ We do recommend changes to the transparency and accountability of UUP. That is discussed at section C.5.

⁶⁷ It should be noted that the CPUC has a separate program, typically referred to as Rule 20, which also funds certain undergrounding activities. The 3.53% UUP surcharge was established taking into account the then applicable Rule 20 rate. It is recommended that the franchise provision take into account possible revisions to Rule 20.

⁶⁸ CPUC Decision 11-12-035 (2011), Decision 12-05-037 (2012) and Decision 13-04-030 (2013).

mandated by statute.⁶⁹ Currently, 20% of EPIC funds are administered by investor-owned utilities, under CPUC supervision and the utility is not required to expend the revenues collected from City residents and businesses for their benefit. The natural gas public purpose program charges (for such programs as low-income assistance, energy efficiency, and research and development) are remitted to the California Department of Tax and Fee Administration and are later allocated to investor-owned utilities or other entities designated by the CPUC to administer these programs. If the City and the utility agree, the utility would seek CPUC authority for the City to administer these funds for the benefit of City residents and businesses. These public purposes charges collected from energy consumers with the City amount to several million dollars each year. This provision will not change these charges nor will it increase electricity or natural gas rates. However, if the utility's petition is approved by the CPUC, the City would be empowered to manage these funds for the benefit of energy consumers within the City.

Under the recommended provision, the utility and City shall cooperatively develop and submit the initial Joint Policies Guide to the City Council no later than twelve months after the effective start date of the franchises. This Joint Policies Guide shall be cooperatively updated between City and Grantee and re-sent to council for adoption every four years thereafter. Each year, the utility shall present a report to the City Council on the status, impacts, and other pertinent information regarding the implementation of the Joint Policies Guide.

We also recommend including provisions in the electric franchise requiring the utility to comply with the substance of CPUC's, Rules of Conduct for Electrical Corporations Relative to

⁶⁹ Assembly Bill 1002, codified at Pub.Util.Code §§ 890-900.

Community Choice Aggregation Programs, usually referred to as the CCA Code of Conduct.⁷⁰
By including it in the franchise, the City can ensure enforcement of its requirements.

5. Relocations, Undergrounding and other Operational Protocols

The 1970 franchises and 2002 amendment include provisions governing relocation of utility facilities at utility cost if they conflict with City's uses of the streets, undergrounding of utility facilities, coordination of work and similar operational issues. The 2002 amendment significantly expanded undergrounding within the City. The concepts behind these provisions were sound. However, due to a variety of factors, implementation proved increasingly difficult. Following are some of the operational problems the City is experiencing under the existing franchises.

a. Many of the operational details were to be addressed in a Manual of Administrative Practice prepared jointly by SDG&E and the City, which was supposed to be updated annually. However, contrary to the 1970 franchises, the manual has not been updated since 1986.

b. In recent years, the City has experienced significant problems with SDG&E's operations under the 1970 franchises. The City's operational departments have reported severe and increasing difficulties with SDG&E's performance and its interaction with the City on such issues as relocating SDG&E facilities, with the City bearing costs for protecting SDG&E facilities when City is working in streets, and with the undergrounding program. In a complex

⁷⁰ Attachment 1 to CPUC Decision 12-12-036 (2012).

long-term operating relationship such as franchises, some degree of friction is to be expected. However, the City's operating departments report that the issues have become excessive.

City operational departments report that SDG&E has become increasingly uncooperative in coordinating street work. SDG&E has consistently refused to provide the City with diagrams of SDG&E's underground facilities without extraordinary conditions being demanded, making design of City facilities, such as water pipes and storm drains unnecessarily expensive. In recent years, in a change from long-standing practice, SDG&E has refused to send an inspector to the site of City underground projects (to avoid the cost and safety risk of digging into SDG&E facilities) unless the City pays for the inspector.

These problems have become so severe that there has been repeated litigation. In 2003 SDG&E refused to pay costs to relocate and reestablish services in the East Village when Petco Park was built and the area redeveloped. The result was litigation that was protracted by SDG&E to the California Court of Appeals, where SDG&E's excuses were unsuccessful. More recently, SDG&E has refused to pay any costs for relocating its facilities which conflict with the City's use of the streets for sewer and municipal water projects in the City's Pure Water Program, making an argument that the language of the franchise was modified by the Manual of Administrative Practice. Due to the need to keep the very important sewer and municipal water program on schedule, the City was forced by SDG&E to pay an initial amount of \$35 million to SDG&E under protest. This situation has resulted in yet another lawsuit with SDG&E over its relocation obligations, which is pending at this time. Other refusals by SDG&E to bear the costs of resolving utility conflicts through relocation have extended to sewer and municipal water projects of the City that are not part of the Pure Water Program.

c. The City also has a major concern over SDG&E's lack of coordination on the Utility Undergrounding Program (paid for by the City), failure to provide meaningful documentation of its charges, and what are apparently excessive and unexplained costs.

The City Attorney's Office recently published a memorandum regarding an ongoing dispute with SDG&E over unexplained and unverified invoices for costs on undergrounding projects.⁷¹ It reports that SDG&E has regularly refused access to accounting and contracting documents necessary to evaluate and verify the cost of the undergrounding program. However, limited access was recently made available for a single project. The SDG&E estimate for total job-to-date charges to be invoiced for that one project was \$19 million. City staff were only able to identify \$8.1 million of direct costs. This left \$10.9 million, or more than 57% of total project costs, to be identified as overhead costs. While some overhead costs are customary and expected, the City Attorney's Office reported that this is unusually high and required further investigation. This is concerning and made even more so by the fact that the City Attorney's Office also reported that the City encountered similar issues with SDG&E overhead costs and invoicing practices many times in the past decade.

The following recommended provisions would address these issues and better protect the City's interests.⁷²

First, we recommend retaining the existing language of the City reserved rights provision but adding to it to explicitly eliminate "loophole" arguments that have been repeatedly arisen under the current franchises to avoid the City's intent under the 1970 franchises and 2002 amendment. As part of this, we recommend that the new franchises require the utility to proceed to promptly resolve conflicts with City's uses at its own cost even if it disputes its duty to do so.

⁷¹ <https://docs.sandiego.gov/memooflaw/MS-2020-16.pdf>

⁷² We also recommend that the City Attorney's Office update the language of the franchises to generally improve clarity and efficient operations.

We also recommend that the new franchises contain provisions which disallow any conceivable utility arguments of exception, and require the utility to pay all City's attorney fees in the event of any litigated dispute. This would also improve efficiency in City-utility planning and operational interactions and increase utility accountability and transparency by indisputably providing the City with the absolute first priority for uses of the streets without cost on account of the presence of the utility's facilities.

Second, we recommend that the utility be required to provide the City with as-built diagrams to the extent that the utility is permitted to do so by law. If appropriate to keep this confidential, the City should do so subject to franchise provisions.

Third, it is recommended that operational details be spelled out in Biennial Permits, replacing the Manual of Administrative Practices. As experience with the 1970 franchises demonstrate, long-term documents such as the Manual of Administrative Practices often become out-of-date as, despite initial intentions, they are not updated frequently. A Biennial Permit process forces periodic review and is an opportunity for both the City and the utility to consider improvements. To promptly commence operations under the Biennial Permit process, and to increase transparency in the bidding process, the form of the initial Biennial Permit should be attached to the ITB. Thereafter, the utility and the City should work cooperatively to update and modify as appropriate.

6. City Right to Purchase

The 1970 franchises reserve to the City the right to acquire the utility's facilities through agreement with the utility or by exercise of the City's right of eminent domain. However, the condemnation process can be extremely slow and costly thus becoming an artificial barrier if the City elects to develop community-owned utilities. In fact, investor-owned utilities often use the

protracted condemnation process as a method of thwarting a community decision to develop its own utility.

The recommended new franchises retain those provisions but add the right of the City to purchase the utility's facilities within the City with the valuation to be established by a panel of appraisers. Similar provisions are included in franchises such as the City of Stockton-PG&E electric franchise and the City of Long Beach-SCE electric franchise. The utility's right to fair compensation is fully protected while at the same time significantly reducing both the cost and time required to exercise the City's right to acquire.

7. Audits, Dispute Resolution and other General Provisions

The recommended franchises will contain a number of improvements to the general provisions.

a. Performance Audit

Most notably, a comprehensive utility performance audit shall be conducted by the City every four years. The results of the performance audit will be provided to the City Council and publicly reported. This will provide the City with valuable information to determine whether the City should exercise its enhanced enforcement authority.

b. Dispute Resolution

Another recommended improvement is the addition of a dispute resolution provision. Under the 1970 franchises the City's remedies for violations were limited to litigation (an expensive and slow process) or to declaring a forfeiture of the franchise. The recommended

dispute resolution clause would provide for meetings of senior representatives of the City and the utility to resolve disputes as they arise. If the senior representatives are unable to agree, then the matter is submitted to non-binding mediation by a neutral mediator. Although mediation is not binding, in most cases the presence of a neutral party results in agreement. If mediation fails, the City still has the remedies of litigation or declaring a forfeiture.

c. Liquidated Damages and Attorneys' Fees

In the event that litigation is necessary, we recommend that the proposed franchises add provisions for liquidated damages which simplifies recovery of damages. We also recommend consideration by the City Attorney's Office of a provision requiring payment to the prevailing party of the costs of litigation including attorneys' fees and court costs. This has two benefits. It would compensate the City for the costs of litigation and it should discourage the utility from breaching the franchise. On the other hand, it could also increase costs to the City in the event that the utility is the prevailing party.

D. Local Publicly-Owned Electric and Gas Distribution Systems

1. Summary

Creation of a community-owned utility typically involves considerable investment and ongoing management. Determining whether a community-owned utility is financially feasible for the City requires an analysis of numerous factors. In addition, the decision to form a community-owned utility raises policy issues unique to each community.

2. Background Information

The City of San Diego is authorized by the California Constitution to establish and operate both an electric and a natural gas utility.

A municipal utility could serve all, or selected portions, of the electricity and/or gas demands of residents and businesses within the City or even beyond the City. Most municipal utilities in California deliver substantial benefits to their respective communities.⁷³

California public power and natural gas enterprises typically, although not invariably, have been quite successful. Typically, municipal energy enterprises:

- provide local control to pursue local policy objectives such as economic development or renewable energy development,
- have rates lower than investor-owned utilities,
- achieve high levels of customer satisfaction.

⁷³ See, Figures 1 and 2, above.

It is typical for investor-owned utilities, when confronted with the possibility of a new publicly-owned utility (POU), to attempt to intimidate the public and elected officials by a number of means including disinformation. These include arguments about job security for its workers (which makes little sense as the POU should welcome skilled workers), and assertions that the publicly-owned utility will be more expensive than the investor-owned utility and unreliable (which is contrary to experience in the industry).

3. Authority and Governance

The California Constitution, Article XI § 9 empowers all California cities to own and operate electric utilities and to sell electric power and natural gas, both within and beyond their boundaries. Public Utilities Code section 10002 and 10004 and Government Code section 29732(a) are to similar effect. The City Charter, Article I §§ 1 and 2, also authorizes the City to own and operate electric utilities and to exercise the powers granted by the California Constitution.

Municipal electric enterprises are subject to local governance by their city councils or such boards or commissions as may be established by the city.⁷⁴

Local governance extends to ratemaking and rate design.⁷⁵ Neither the CPUC⁷⁶ nor FERC⁷⁷ have ratemaking or other general regulatory powers over a municipal electric enterprise.⁷⁸

⁷⁴ See, e.g. San Francisco City Charter Article VIII B, granting the San Francisco Public Utilities Commission broad powers in governing San Francisco's utility operations.

⁷⁵ A city establishes utility rates pursuant to its independent legislative power. *American Microsystems, Inc v. City of Santa Clara*, 132 Cal. App. 986 (1982); *Durant v. City of Beverly Hills*, 39 Cal. App. 2d. 133, 136-137 (1940).

Formation of a municipal utility by the City of San Diego requires compliance with the City's procedures and general provisions of state law such as the Bagley-Keene Open Meeting Act, Government Code Section 11120 *et seq* and the California Environmental Quality Act Public Resources Code § 21000 *et seq*.⁷⁹ There is no state law requirement of a vote of a city's residents to form a municipal utility to provide electric service within a city's boundaries but a vote of a city's residents might be required on other issues, such as certain types of financing.

Approval by the CPUC or by FERC is not required. Approval by the San Diego County Local Agency Formation Commission (LAFCO) is not required for the formation of a utility to serve within the City.⁸⁰ However, a provision of the Cortese-Knox-Hertzberg Local Government Act does apparently require LAFCO approval for services outside a city's boundaries.⁸¹

(Footnote continued from previous page)

⁷⁶ The CPUC has stated: "We acknowledge that this Commission does not have authority to regulate the rates, charges or service of municipal utilities. Subject to limitations set forth in the California Constitution, the Legislature has plenary power to delegate authority to the Commission and to impose regulations on publicly owned utilities. The publicly owned utilities are given exclusive power to establish the rates and charges paid by their customers for services provided by these utilities." CPUC Decision 03-07-028 (2003); footnote omitted. *See, also, City of Pasadena v. Railroad Commission*, 183 Cal. 526, 536 (1920); *California Apt. Ass'n v. City of Stockton*, 80 Cal. App. 4th 699, 708 (2005); *American Microsystems, Inc. v. City of Santa Clara*, 132 Cal. App. 986 (1982); *City & County of San Francisco v. Western Airlines, Inc.*, 204 Cal. App. 2d. 105, 131, (1962) certden371 U.S. 953 (1963).

⁷⁷ Federal Power Act §201(f), 16 USC §824e; *Bonneville Power Administration v. Federal Energy Regulatory Commission*, 422 F. 3d 908 (9thCircuit, 2005) (request for rehearing *en banc* denied, 2007). FERC has jurisdiction over a narrow category of sales at wholesale by municipal entities.

⁷⁸ The CPUC has jurisdiction over certain safety issues related to electric lines. FERC has jurisdiction over a narrow category of sales at wholesale entities.

⁷⁹ Whether a Negative Declaration, Environmental Assessment or Environmental Impact Report will be required by CEQA is dependent on the specifics of the City Council action.

⁸⁰ The Cortese-Knox-Hertzberg Local Government Act, Government Code § 56000 *et seq*, does not provide for Local Agency Formation Commission ("LAFCO") approval decisions by cities to form electric service entities for service within a city's boundaries. Government Code § 56133(e): "...This section does not apply to a local publicly owned electric utility, as defined by Section 9604 of the public Utilities Code, providing utility services that do not involve the acquisition, construction, or installation of electric distribution facilities by the local publicly owned electric utility, outside the utility's jurisdictional boundaries".

⁸¹ Government Code § 56133(a).
(Footnote continued on next page)

4. Financial Analysis

The City retained a team of highly-qualified consultants, NewGen/Advisian/MRW, to analyze such issues as the cost of acquiring SDG&E’s facilities within the City (including compensation to SDG&E for severance costs) and evaluate *pro forma* estimates of the costs of operating both the City-owned electric distribution utility and the gas distribution utility.⁸²

This consultant team has prepared financial analyses and recommendations regarding the economic feasibility of the purchase of the electric and gas distribution infrastructure by the City of San Diego as an alternative to granting franchises to an investor-owned utility. MRW conducted an analysis of economic feasibility considering numerous alternatives and variables.

MRW developed three cases for costs of operation of the utilities: Low Cost Case, Base Case and High Cost Case.⁸³ MRW then examined three different possible costs of acquiring SDG&E's facilities within the City. Based on those cost scenarios, MRW then examined whether customer costs under those different scenarios would be greater than or less than the costs that customers would pay if they remained as customers of SDG&E.

MRW's findings are summarized by three graphs for the electric distribution utility (EDU) and three graphs for the natural gas distribution utility (GDU). However, as is typically the case with long-term forecasts of complex matters, it should be recognized that there is significant uncertainty in the assumptions used, and changes in those assumptions will result in changes to the results.

(Footnote continued from previous page)

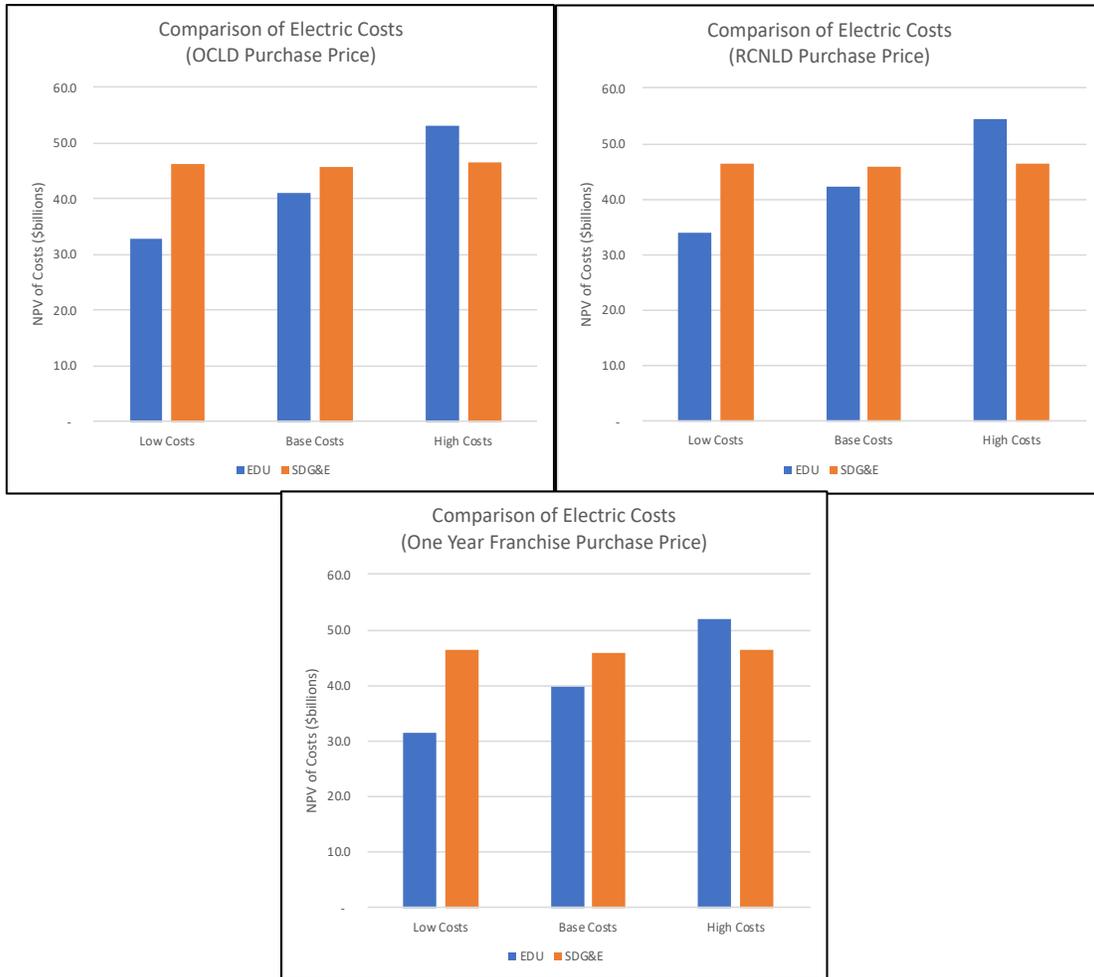
⁸² MRW assumed for its Base Case that the costs to operate a City-owned utility would track those incurred by SDG&E for providing similar activities. MRW did not develop independent estimates of the costs of operation for its Base Case

⁸³ It is important to note that the Low and High cost scenarios are extreme cases that assume either favorable or adverse costs in all years of the forecasts. Such outcomes are unlikely, with actual costs more likely to be closer to Base Case results.

The graphs in Figure 3 depict the comparison of electric customer costs under EDU and SDG&E ownership based on alternative purchase price scenarios under three different sets of assumptions regarding the costs of owning and operating those assets (*i.e.*, Low, Base, and High Cost assumptions).

Figure 3

Comparison of Customer Costs Under EDU and SDG&E



As shown in Figure 3:

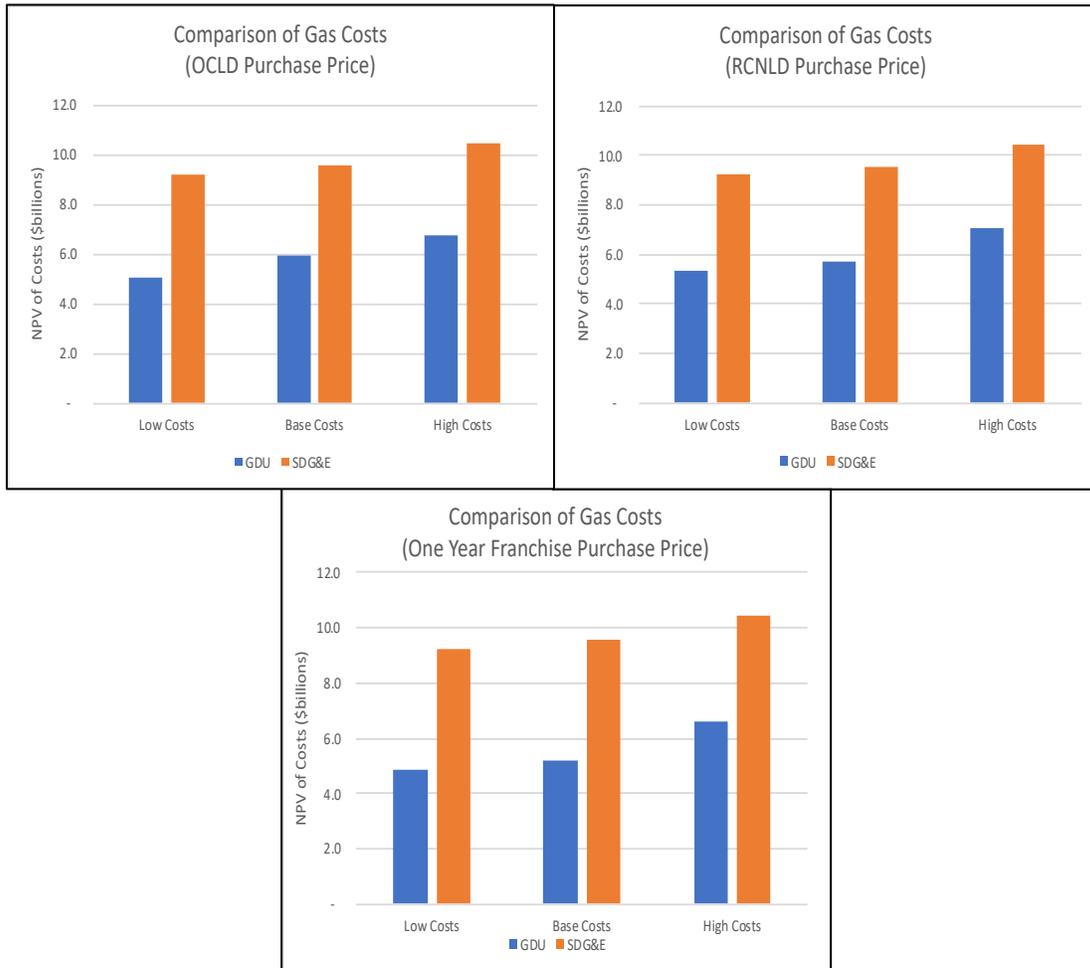
- Customer costs under the EDU are lower than under SDG&E in the Low Cost and Base Case scenarios for all purchase price assumptions examined.
- Customer costs under the EDU are higher than under SDG&E in the High Cost scenario for all purchase price assumptions examined.

The purchase price assumption does not have significant effect on the cost customers would pay for EDU service. This is because EDU fixed asset costs (*e.g.*, annual debt service) are a small portion of the total cost of service for the EDU. Purchased power supply costs are the largest portion of cost of service for the EDU.

The graphs in Figure 4 depict the comparison of gas customer costs under GDU and SDG&E ownership based on alternative purchase price scenarios under three different sets of assumptions regarding the costs of owning and operating those assets (*i.e.*, Low Cost Case, Base Case, and High Cost Case).

Figure 4

Comparison of Customer Costs Under GDU and SDG&E



As shown in Figure 4, customer costs under the GDU are less than SDG&E service for all cost scenarios and acquisition cost assumptions.

5. Additional Considerations

Operation of electric and gas distribution systems imposes responsibilities which must be met in a highly reliable, safe and cost-efficient manner. This is a critical responsibility which requires a skilled workforce.

Formation of new City-owned electric or gas distribution utilities would require the City to develop a qualified team. The most obvious source for such a team would be employees of SDG&E who might elect to continue to provide services to San Diego under a new ownership structure. If the City decides to form City-owned electric and/or gas distribution utilities, the City should give serious consideration to ensuring the job security and seniority of such employees and to the continuation of labor union relationships which had existed with SDG&E.

If insufficient numbers of former SDG&E employees are available, the City could contract with others to provide such services. This could include private enterprise and other publicly-owned utilities.

A major business risk facing a municipal electric utility is that the municipal electric utility's power supply charges, including exit fees, will exceed the incumbent utility's power supply charges. The City's decision to join SDCP involved many of the same issues. However, unlike a Community Choice Aggregator, a municipal utility is not usually exposed to direct competition with the utility.

On the other hand, a municipal electric system has the added responsibility of operating a distribution system. While it is critical that a distribution system be operated in a safe and

reliable manner, it is a mature industry with well-established procedures and networks of suppliers.

The City has not yet ventured into natural gas procurement. However, natural gas is currently abundant and prices are very low (a condition projected by most observers to continue for the foreseeable future). There are also numerous gas advisers and brokers who could assist a municipal gas utility. As with an electric distribution system, it is critical that the natural gas system be operated in a safe and reliable manner, and here too, the industry is mature, with well established procedures and suppliers.

Appendix A – Glossary

The following terms, used frequently in this draft report, have the meanings indicated.

“Charter” means the City Charter of the City of San Diego.

“CCA” means Community Choice Aggregator such as San Diego Community Power.

“City” means the City of San Diego municipal corporation.

“CPUC” means the California Public Utilities Commission.

“EPIC” means Electric Program Investment Charge.

“Federal Power Act” means 16 U.S.C. §§ 791 et seq.

“FERC” means the Federal Energy Regulatory Commission.

“ITB” means Invitation to Bid on a new electric franchise when finalized by the City of San Diego.

“LADWP” means The Los Angeles Department of Water and Power, a department of the City of Los Angeles.

“POU” means Local Publicly Owned Electric Utility as that term is defined at Public Utilities Code § 224.3.

“Pub.Util.Code” means the Public Utilities Code of the State of California.

“San Diego” means the area within the boundaries of the City of San Diego, including persons and activities located therein.

“SDG&E” means the San Diego Gas & Electric Company.

“SDCP” means San Diego Community Power.

“SMUD” means Sacramento Municipal Utility District.

“UUP” means Utility Undergrounding Program

Appendix B - Resumes

Resume of Howard V. Golub



Howard Golub has over forty years of experience in the energy industry. He provides services to a wide range of clients in the energy industry including utilities, large consumers, public agencies, independent power producers, and developers of technologies for the production of energy.

Mr. Golub's work includes strategic planning, merger and acquisition, utility system creation, energy project development, contract negotiation and formulation, contract restructuring and alternative dispute resolution. He makes appearances before variety of federal and state agencies including the Federal Energy Regulatory Commission and the California Public Utilities Commission.

Past assignments include:

- creation of new utility systems and counseling developing systems
- community choice aggregation
- feasibility studies involving legal, regulatory, operational and financial issues
- rulemaking proceedings
- rate-setting and rate design proceedings
- discounted power rates
- utility exit fees
- utility tariff interpretation and modification
- power sales agreements, both for sellers and buyers
- interconnection agreements and transmission access agreements
- natural gas supply agreements
- development of renewable resource power projects
- hydroelectric licensing

- certificates of public convenience and necessity
- franchise agreements
- utility rights-of-way
- environmental compliance

From 1986 to 1994 he was Vice President and General Counsel of the Pacific Gas and Electric Company, one of the largest energy utility companies in the United States. He reported directly to the Board of Directors and to the Chief Executive Officer and served on the company's Management Committee consisting of the CEO and 10 other senior officers. As chief legal officer of the company, he had extensive experience with all aspects of energy law – regulation, legislation, commercial transactional, and litigation. He was also PG&E's lead environmental officer, responsible for environmental policy and for auditing environmental compliance. He formulated and implemented a proactive environmental program which increased competitiveness and earnings, was strongly endorsed by national environmental leaders, and personally awarded the nation's highest environmental medal by the President of the United States.

Prior to entering private practice, Mr. Golub was an Assistant District Attorney for New York County (1968-1969) and an officer in the Judge Advocate General's Corps of the U.S. Navy (1969-1973) where he tried numerous courts-martial and later served as a U.S. Military Judge. After leaving active duty, Mr. Golub remained in the Naval Reserves, rising to the rank of Captain.

Admissions

Mr. Golub is admitted to practice in California and New York and numerous federal courts, including the United States Supreme Court.

Education

Harvard Law School, J.D.
Hunter College, B.A. *cum laude* and Phi Beta Kappa
Naval War College: Senior Reserve Officer Course
MIT Sloan School of Management: Executive Management Program for General Counsel

Affiliations

American Law Institute, Life Member
American Bar Association
American Bar Foundation

Instructional Experience and Publications

- ENERGY IN CALIFORNIA ANNUAL CONFERENCE: Conference Co-Chair for eight years
- 2008 – NATURAL GAS & ELECTRICITY JOURNAL (February 2008): Co-Author, *Community Choice Aggregation Is a New Solution for Energy Markets*
- 2007 - ENERGY IN CALIFORNIA 2007 CONFERENCE: *Community Choice Aggregation*
- 2007 – BUYING AND SELLING POWER IN THE WEST CONFERENCE: Renewable Energy Development
- 2006 – ENERGY STRATEGIES FOR CITIES AND OTHER PUBLIC AGENCIES CONFERENCE: Conference Co-Chairman
- 2006 – WESTERN POWER SUPPLY FORUM: Conference Chairman
- 2005 - TRIBAL ENERGY CONFERENCE: Financing Tribal Energy Projects
- 2005 - NATURAL GAS & ELECTRICITY JOURNAL (April 2005): New Markets Tax Credits for Energy Projects
- 2004 - CALIFORNIA ENERGY MARKET DIRECTIONS CONFERENCE: Municipalization and Community Choice Aggregation
- 2004 - ENERGY IN THE SOUTHWEST CONFERENCE: New Opportunities for Power Development
- 2004 - MILKEN INSTITUTE ANNUAL GLOBAL POLICY: Energy Panel
- 2004 - UNIVERSITY OF SOUTHERN CALIFORNIA SCHOOL OF ECONOMICS /SAN FRANCISCO PUBLIC UTILITIES COMMISSION ROUNDTABLE: California Electricity Policy
- 2003 - BUYING AND SELLING POWER IN THE WEST CONFERENCE: Energy Contract Strategies
- 1997 - EDISON ELECTRIC INSTITUTE Electric Utility Restructuring and Antitrust Compliance.
- 1997 - AMERICAN GAS ASSOCIATION: Utility Industry Restructuring
- 1996 - STANFORD LAW SCHOOL: Corporate Directors' College: Corporate Governance
- 1996 - EUROPEAN COMMISSION ANNUAL ENERGY CONFERENCE: Implications of U.S. Developments for European Utility Industry Restructuring and Privatization.
- 1995 - STANFORD LAW SCHOOL: Corporate Directors' College: Corporate Governance
- 1994 - EDISON ELECTRIC INSTITUTE Conference on Corporate Compliance Programs: Beyond Compliance: Achieving Environmental Excellence.

- 1993 - STANFORD BUSINESS SCHOOL MAGAZINE (September 1993): co-author Reaching Accord at the Boardroom Table
- 1993 - CORPORATE GOVERNANCE ADVISOR (August/September 1993) co-author A New Perspective on Corporate Governance; Second Compact for Owners and Directors
- 1992 - AMERICAN ARBITRATION ASSOCIATION: ADR as a Tool for Achieving Pareto Optimal Results and Increasing Client Competitiveness (a.k.a. Making Legal Lemons into Marketable Lemonade).
- 1992 - CALIFORNIA SENATE NATURAL RESOURCES COMMITTEE (Fourth Annual Natural Diversity Forum); Biodiversity and Environmental Quality Management.
- 1992 - UNIVERSITY OF OREGON SCHOOL OF LAW: Public Interest Environmental Law Conference.
- 1991 - AMERICAN BAR ASSOCIATION (First Annual Conference on North American Energy Trade and Environmental Policy): Towards a North American Energy and Environmental Policy.
- 1991 - NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS CONFERENCE Legal and Regulatory Issues for Natural Gas Vehicles.
- 1991 - INTERNATIONAL BAR ASSOCIATION: The Role of U.S. and Canadian Regulatory Tribunals in Integrating International Energy Markets.
- 1991 - STANFORD LAW SCHOOL BOARD OF VISITORS: The Roles of Lawyers on the Domestic Scene: Environmental Initiatives.
- 1991 - AMERICAN GAS ASSOCIATION LEGAL FORUM: Regulatory Restructuring of the California Gas Utility Industry.
- 1990 - AMERICAN BAR ASSOCIATION: (Conference on Electricity, Law and Regulation): Developing Competition in Bulk Power Markets.
- 1988 - EXECUTIVE ENTERPRISES: Wholesale Power Market Competitive Issues.
- 1987 - CANADIAN ENERGY RESEARCH INSTITUTE: Structuring Utility-Independent Energy Producer Contracts.
- 1987 - EDISON ELECTRIC INSTITUTE: Competitive independent Energy Bidding Proposals
- 1987 - FEDERAL ENERGY BAR ASSOCIATION Competitive Bidding for Electric Capacity: Prospects, Problems, and Proposals.
- 1987 - JOINT ARMED SERVICES — PACIFIC TAX PROGRAM: Income Tax Issues for Military Personnel.
- 1986 - JOINT ARMED SERVICES - PACIFIC TAX PROGRAM: Income Tax Issues for Military Personnel

- 1985 - AMERICAN BAR ASSOCIATION - CANADIAN BAR ASSOCIATION (Joint Symposium On International Energy Trade):
International Trade in Electric Power

Resume of James A. Kelly



Jim Kelly retired from Edison International (EIX) on July 1, 2011, after almost 38 years of service with the Company. EIX is the parent company of Southern California Edison, a regulated electric utility, and Edison Mission Group, an independent power company.

Prior to his retirement, Mr. Kelly was the senior vice president of Transmission & Distribution for Southern California Edison, responsible for the operation and maintenance of an electrical grid comprised of over 12,000 miles of transmission and 100,000 miles of distribution lines spread across a 50,000-square-mile service area. Mr. Kelly led an organization of over 8,000 employees in the utility's T&D business unit, which also maintains and operates more than 900 substations. SCE's T&D organization serves over 14 million people through about 5 million customer accounts. As head of T&D, Mr. Kelly was responsible for an annual capital budget of about \$2.5 billion and O&M of over \$500 million.

Mr. Kelly was also president of Edison ESI, a subsidiary company that operates one of the largest electrical and mechanical repair facilities in the U.S., with over 400,000 square feet of shop space under one roof. Edison ESI provides overhaul, maintenance, testing, repair, and calibration of equipment for other utilities, cogenerators, independent power producers, major industries and public agencies.

Mr. Kelly was previously the vice president of Engineering & Technical Services, responsible for planning, engineering, and designing SCE's electrical grid, as well as research and development, safety and training. In this role, he formed the company's Advanced Technology organization, which has gained national prominence for its leadership role in electric vehicle and Smart Grid technology. Mr. Kelly was one of the early

pioneers of the Smart Grid, developing a roadmap for a smarter, safer, more reliable and more environmentally responsible electric grid. He pioneered the deployment of synchronous phasor measurement, the Distribution Circuit of the Future, and many other advances in grid sensing, monitoring and control. Among many other awards and honors, Mr. Kelly was selected as the IEEE's "Leader in Power" in 2009.

Mr. Kelly also previously served as the vice president of Regulatory Compliance and Environmental Affairs, and has in-depth experience with environmental regulation, permitting and licensing. Mr. Kelly has served as an expert witness for over 20 years in countless regulatory and legislative proceedings.

Since his retirement, Mr. Kelly has advised or directed a number of firms in the energy space. Mr. Kelly:

- is a Director of S&C Electric Company, a global provider of equipment and services for electric power systems. Founded in 1911, the Chicago-based company designs and manufactures switching and protection products for electric power transmission and distribution. He chairs the governance committee and serves on the audit committee.
- is a Director of Ice Energy, the leading provider of smart grid-enabled, distributed energy storage to the utility industry. Ice Energy delivers cost-effective solutions at grid-scale to reduce peak demand, improve energy system efficiency and reliability, and transform the way the utility system operates.
- is a Director of Dynamic Engineers, a firm that has developed the complex analytics required to perform true Dynamic Line Rating for transmission lines.
- is the co-founder of and Partner in Coachella Partners, a venture that provides specialized advisory services to Native American tribes on matters related to energy.
- advises local cities and agencies on energy issues.
- serves as a trusted advisor to MWH (a Stantec company), a global consulting, engineering and construction company.
- is Chairman of the California Infrastructure Institute, a non-profit corporation dedicated to finding innovative and environmentally responsible solutions to the problems of the built urban infrastructure.
- is a member of the Advisory Board of Eos Energy Storage, developers of the novel, proprietary Znyth™ technology—the first low-cost, long-life, inherently safe, energy dense, and highly efficient aqueous battery.
- served as the CEO and a Director of ARES, a firm pioneering the use of electric locomotive technology for large-scale energy storage.
- has served as a senior advisor and consultant for selected governmental and private clients, including SpaceX, the Port of Long

Beach and the Los Angeles County Metropolitan Transportation Authority and state-owned enterprises in Singapore and Abu Dhabi.

An accomplished and sought-after speaker, Mr. Kelly has given hundreds of talks on technology topics, regulatory policy and leadership to gatherings ranging from 20 to 5,000 attendees.

Mr. Kelly earned a bachelor's degree from California State University, Long Beach, and a master's degree from California State Polytechnic University. He holds teaching credentials in several subjects and has taught at a number of colleges and universities throughout his career.

Among his many philanthropic interests, Mr. Kelly has served on the Engineering Advisory Boards for the University of Southern California and California State University, Los Angeles. Mr. Kelly is also a member of the Industry Advisory Forum at the California Institute of Technology and past vice-chairman of the board at Don Bosco Technical Institute.

Resume of Michele Chait

PROFESSIONAL SUMMARY

Electricity sector professional with 25 years of experience. Expert in supply of energy to large users. Energy contracting, energy supply & strategic planning, environmental commodities, electric rate design and rate discount negotiations. Utility coordination and development of regulatory strategies. Power project development, finance, PPA structuring, negotiations. Grid-scale generation and distributed resource asset valuation. Utility business models. GHG reduction strategies and GHG quantification. Vehicle electrification. Expert witness testimony.

MICHELE CHAIT LLC

2020-Present

Managing Member

San Francisco, CA

- Developed excel model to evaluate island utility business models and utility financial health for Lawrence Berkeley National Laboratory.
- Advising Los Angeles County Metropolitan Transportation Authority (LA Metro) regarding sustainability program and electricity cost reduction strategies.
- Expert witness on the economic feasibility of developing solar photovoltaic facilities on relevant properties pursuant to an eminent domain action.
- Sponsored affidavit for Starwood Energy Group's Greenleaf Energy Unit 2, LLC 2020 RMR contract FERC filing.
- Port of Long Beach: On-call energy services (in contracting).

ENERGY AND ENVIRONMENTAL ECONOMICS, INC (E3) 2006-2019

Director

San Francisco, CA

Select Projects: Finance and Asset Valuation

- Advised on power plant development and acquisition/divestiture due diligence. Valuation, market price projections, quantification of regulatory/policy impacts on asset value. Fossil, biomass, hydro, landfill gas, storage, solar PV, solar thermal, onshore and offshore wind, and CCS.
- Developed and delivered four-day capacity building training program in Mongolia, funded by World Bank. Program attended by Ministry of Energy, National Dispatching Center, and the Energy Regulatory Commission. Recommended transitioning to competitive procurement from a feed-in tariff structure and renegotiation of certain clauses in

existing PPAs. Created model renewable energy power purchase agreement and excel-based PPA pricing model.

- Led valuation of wind generation in 11 Western states for the State of Wyoming Governor's Office to evaluate the impact of a potential \$1 per MWh excise tax. Analysis quantified key drivers of PPA price differences in each state.
- Advisor to private equity firm in the successful acquisition of nearly 1 GW of wind generation.

Select Projects: Utility Rate Design, Cost of Service Studies, Cost of Capital Determination

- Prepared Direct and Rebuttal Testimony and delivered oral testimony in Phase IIB of California Public Utilities Commission (CPUC) rate design window ("RDW") proceedings A. 17-12-011 et al regarding implementation of statewide default residential TOU rates.
- Developed CPUC Public Tool supporting NEM 2.0 (Rulemaking 14-07-002) enabling users to analyze potential NEM alternative rate designs for residential and commercial customers. Tool results utilized by CPUC to revise NEM compensation for California's IOUs.
- Led analysis for California Transit Association to design revenue neutral electricity rate structures that can promote the widespread electrification of transit buses under both managed (Smart) and un-managed charging scenarios.
- Led development of CCA-specific default residential time-of-use (TOU) rate structures for Clean Power Alliance in context of statewide rollout of default residential TOU rate structures.
- Presented at Ontario Energy Board Technical Conference regarding the appropriate cost of capital for 2008 rates, California Energy Commission 2011 Cost of Generation Modeling Workshop, and 2018 CPUC zero emission vehicle (ZEV) Rate Design Forum.

Select Projects: Distributed Energy Resources

- Advised the Authority for Electricity Regulation in Oman on international best practices and regulatory changes necessary to enable penetration of light-duty electric vehicles in Oman. Updated study in 2019: participated in press conference held in Muscat, Oman and facilitated workshop to elicit next steps in distribution company action plans.
- Developed excel calculator tool for the U.S. Environmental Protection Agency's National Action Plan for Energy Efficiency (NAPEE). Analyzed impacts of energy efficiency from customer, utility, and societal perspectives and quantified utility business model and regulatory solutions to utility shareholder and non-participating customer impacts.

- Supported development of Lawrence Berkeley National Laboratory's (LBNL) Financial Impacts of Distributed Energy Resources (FINDER) model analyzing the impacts of demand-side management on participating and non-participating ratepayers and utility financial health. Advised on revenue requirement calculations, rate design, utility and customer incentive mechanisms, utility business models, financial evaluation metrics, and performed model vetting.
- Developed regulatory and business models achieving zero net energy (ZNE) for the single-family home portion of UC Davis's West Village community.
- Advised an international financier on DER program design aspects critical to the economic proposition of distributed solar PV in Saudi Arabia.

Select Projects: Large Energy Users

- Supported the Port of Long Beach, the second-busiest port in the U.S., in rate discount negotiations with Southern California Edison (SCE). In 2014, The CPUC approved new SCE Rate Schedule ME providing electric rate reductions and installation of major electric infrastructure at no cost to the Port or its tenants. Rate discounts are expected to yield over \$300 million in savings and support critical electrification projects at the Port, improving air quality in the region.
- Developed strategies for Los Angeles Metropolitan Transportation Authority, the second largest public transit system in the country to reduce electricity costs. Conceived of several innovative electricity bill reduction strategies worth several million dollars annually and recommended regulatory strategies. Advised on feasibility of implementing certain resiliency measures.
- Supported the University of California to develop strategies achieving carbon neutrality by 2025. Advised individual UC campuses on the economics and qualitative aspects of individual on- and off-campus renewable energy and storage projects. Evaluated deliverability and economic aspects of long-term renewable energy bids received in response to UCOP request for offers (RFO).
- Engaged by CCA clients to conduct integrated resource planning (IRPs), screen renewable energy and paired solar + battery storage procurement bids and recommend shortlisted offers. Estimated CO₂ emissions under several quantification methodologies (Clean Net Short, The Climate Registry, Power Content Label).
- Engaged by a municipal utility to analyze the economic and contractual risks and benefits of participating in the newly formed Kentucky Municipal Energy Agency. Presented findings to Board.

CALPINE CORPORATION

2003-2006

- Led, structured and closed \$100 million non-recourse financing for 600 MW power plant. Financing was first single-asset, merchant project financing completed in California after the energy crisis.
- Created power plant valuation models. Priced & structured PPAs. Supported property tax negotiations.

INTERGEN

1998-2002

- Led permitting process for Egypt's first IPP (Sidi Krir, 680 MW). Organized public consultation meeting. Led negotiations with consortium of 7 international banks to resolve conditions precedent to financing. Project Finance Middle East Power Deal of the Year.
- Successfully negotiated acquisition of site option and permits for 800 MW power plant site.

ENRON INTERNATIONAL

Summer 1997

- Summer Associate in Middle East region power project asset development.

Education

University of Chicago Graduate School of Business (Booth)
Chicago, IL

M.B.A., concentrations in finance and economics

University of California at Berkeley

Berkeley, CA

B.A., Mathematics and Middle Eastern Studies

Publications

1. Chait, M., B. Horii, R. Orans, C.K. Woo (2019) "What should a small load serving entity use to hedge its procurement cost risk?" *Electricity Journal* 32, 11-14.
2. Orans, R., C.K. Woo, B. Horii, M. Chait, and A. DeBenedictis (2010) "Electricity Pricing for Conservation and Load Shifting," *Electricity Journal*, 23:3, 7-14.
3. Woo, C.K., B. Horii, M. Chait and I. Horowitz (2008) "Should a Lower Discount Rate be Used for Evaluating a Tolling Agreement than Used for a Renewable Energy Contract?" *Electricity Journal*, 21:9, 35-40.
4. Cappers, P., C. Goldman, M. Chait, G. Edgar, J. Schlegel, W. Shirley (2009) "Financial Analysis of Incentive Mechanisms to Promote Energy Efficiency: Case Study of a Prototypical Southwest Utility"

Lawrence Berkeley National Laboratory Environmental Energy
Technologies Division.