ABAG POWER
ANNUAL BOARD MEETING

October 25, 2018 (11:00 a.m. to 2:00 p.m.)

Association of Bay Area Governments
Bay Area Metro Center
375 Beale Street, San Francisco, CA 94105
(Conference Room: CR-109 Yerba Buena)

Vice Chair: Dave Brees

1.	**Welcome** ATTACHMENT 1A - ABAG POWER JPA MEMBER LIST	Brees	
2.	**Public Comments**	Brees	
3.	**Approval of Minutes from October 26, 2017 Annual Board Meeting** ATTACHMENT 3A - MINUTES OF OCTOBER 26, 2017	Brees	**Action**
4.	**ABAG-MTC Local Government Services** Staff will provide an update on the ABAG-MTC staff consolidation, and the new MTC Local Government Services section.	Paul	Info.
5.	**Staff Report and Review of Natural Gas Program** Staff will report the results of the Natural Gas Program for the 2017 – 2018 fiscal year. ATTACHMENT 5A – STAFF REPORT ON NATURAL GAS PROGRAM ATTACHMENT 5B – SUMMARY OF NATURAL GAS PROGRAM FY2017-18 ATTACHMENT 5C – REPORT ON RENEWABLE NATURAL GAS RFI ATTACHMENT 5D – CANADIAN SUPPLY/TRANSPORTATION UPDATE	Lahr	Info.
6.	**ABAG POWER Audited Financial Statements and Reports for Fiscal Year (FY) 2017-2018** The audit firm and staff will present audited financial statements and reports for FY 2017-18 ATTACHMENT 6A – FY 2017-18 AUDIT REPORT ATTACHMENT 6B – FY 2017-18 FINANCIAL STATEMENTS ATTACHMENT 6C – FY 2017-18 AUDIT FINANCIAL HIGHLIGHTS	Nowak /Conley	**Action**
7.	**Election of ABAG POWER Officers (Chair and Vice Chair)** ATTACHMENT 7A - PROPOSED EXECUTIVE COMMITTEE FOR FY 18-19	Brees	**Action**
	Break for Lunch		
8.	**Guest Speakers – Biogas/Renewable Natural Gas (RNG) Opportunities** Information: Speakers will discuss programs and opportunities for local agencies related to Biogas/RNG.	Various	Info.

- Merrill Buck (Union City) – Discussion of RNG project with Clean Energy Renewables
- Sarah Deslauriers & Greg Kester (Bay Area Biosolids Coalition / CA Assoc of Sanitary Agencies) – Summary of legislation and planned projects to boost biogas production.

9. San Francisco Bay Area Regional Energy Network (BayREN) Berg Info.
Staff will summarize the programs and accomplishments to date.

Adjourn approximately 2:00 p.m.

THE BOARD MAY TAKE ANY ACTION, INCLUDING NO ACTION, ON ANY ITEM ON THIS AGENDA.

ASSOCIATION OF BAY AREA GOVERNMENTS
Representing City and County Governments of the San Francisco Bay Area

ABAG POWER Active Gas Program Members

Agency	Designated Representative(s)	Membership Status	Number of Active Gas Accounts
Alameda, City of	Liam Garland (P) Erin Smith (A)	Current Gas Member	23
Alameda, City Housing Authority	Danielle Thoe (P) Vanessa Cooper (A)	Current Gas Member	14
Albany, City of	Mark Hurley (P) Nicole Almaguer (A)	Current Gas Member	4
Atherton, Town of	George Rodericks (P)	Current Gas Member	7
Benicia, City of	Lorie Tinfow (P) Alan Shear (A)	Current Gas Member	18
Contra Costa, County of	Brian Balbas (P) Diana Oyler (A)	Current Gas Member	133
Cupertino, City of	Misty Mersich (P) Katy Nomura (A)	Current Gas Member	10
Fremont, City of	Mike Sung (P) Dan Schoenholz (A)	Current Gas Member	44
Golden Gate Bridge District	Jennifer Mennucci (P) Alice Ng (A)	Current Gas Member	5
Gonzales, City of	Rene Mendez (P) Harold Wolgamott (A)	Current Gas Member	7
Half Moon Bay, City of	David Boesch (P) Matthew Chidester (A)	Current Gas Member	4
Hercules, City of	David Biggs (P)	Current Gas Member	5
Los Altos, City of	Dave Brees (P) Chris Jordan (A)	Current Gas Member	11
Mill Valley, City of	Eric Erickson (P)	Current Gas Member	10

Agency	Designated Representative(s)	Membership Status	Number of Active Gas Accounts
Millbrae, City of	Khee Lim (P)	Current Gas Member	7
Milpitas, City of	Chris Schroeder (P) Zachary DeVine (A)	Current Gas Member	12
Monte Sereno, City of	Terry Blount (P)	Current Gas Member	2
Moraga, Town of	Norman Veloso (P)	Current Gas Member	3
Napa, County of	Steve Lederer (P) Liz Habkirk (A)	Current Gas Member	11
Oakland, City of	Daniel Hamilton (P) Pete Fong (A)	Current Gas Member	115
Orinda, City of	Steve Salomon (P)	Current Gas Member	4
Pacifica, City of	Lorenzo Hines (P)	Current Gas Member	17
Petaluma, City of	Corey Garberolio (P)	Current Gas Member	7
Pleasanton, City of	Kathleen Yurchak (P) Derek Lee (A)	Current Gas Member	25
Regional Administrative Facility Corporation	Sean Brooks (P)	Current Gas Member	1
Richmond, City of	Angela Walton (P)	Current Gas Member	39
Salinas, City of	Michael Ricker (P) Miguel Gutierrez (A)	Current Gas Member	27
San Carlos, City of	Tara Peterson (P)	Current Gas Member	7
San Mateo, County of	Gary Behrens (P)	Current Gas Member	43

ASSOCIATION OF BAY AREA GOVERNMENTS
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Agency	Designated Representative(s)	Membership Status	Number of Active Gas Accounts
San Rafael, City of	Kevin McGowan (P)	Current Gas Member	15
Santa Clara, County of	Lin Ortega (P) Brad Vance (A)	Current Gas Member	47
Santa Rosa, City of	Doug Williams (P)	Current Gas Member	36
Saratoga, City of	Thomas Scott (P) Mary Furey (A)	Current Gas Member	4
Union City, City of	Thomas Ruark (P) Merrill Buck (A)	Current Gas Member	5
Vallejo, City of	Roland Rojas (A)	Current Gas Member	16
Vallejo Sanitation & Flood Control District	Melissa Morton (P)	Current Gas Member	3
Watsonville, City of	Gabriel Gordo (P)	Current Gas Member	18
Winters, City of	John Donlevy (P) Shelly Gunby (A)	Current Gas Member	3

ASSOCIATION OF BAY AREA GOVERNMENTS
Representing City and County Governments of the San Francisco Bay Area

ABAG POWER Non-Active Members (non-voting)

Agency	Designated Representative(s)	Membership Status	Number of Active Gas Accounts
Antioch, City of	Dawn Merchant (P) Jim Jakel (A)	Non-Active	-
Arcata, City of	Randy Mendosa (P)	Non-Active	-
Belmont, City of	Greg Scoles (P)	Non-Active	-
Berkeley, City of	Dee Williams-Ridley (P)	Non-Active	-
Cloverdale, City of	Nina D. Regor (P)	Non-Active	-
Cotati, City of	Dianne Thompson (P)	Non-Active	-
Daly City, City of	Pactricia Martel (P)	Non-Active	-
Davis, City of	Dirk Brazil (P)	Non-Active	-
El Cerrito, City of	Maria Sanders (P) Garth Schultz (A)	Non-Active	-
Foster City, City of	Ray Towne (P)	Non-Active	-
Menlo Park, City of	Alex McIntyre (P)	Non-Active	-
Newark, City of	Peggy Claassen (P)	Non-Active	-
Patterson, City of	Ken Irwin (P)	Non-Active	-
Pinole, City of	Michelle Fitzer (P)	Non-Active	-
San Leandro, City of	Lianne Marshall (P)	Non-Active	-

ASSOCIATION OF BAY AREA GOVERNMENTS
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Agency	Designated Representative(s)	Membership Status	Number of Active Gas Accounts
San Mateo, City of	David Culter (P)	Non-Active	-
San Pablo, City of	Bradley J. Ward (P) Brock Arner (A)	Non-Active	-
Sebastopol, City of	Ron Puccineli (P)	Non-Active	-
Hillsborough, Town of	Maria Edna Masbad (P)	Non-Active	-
Los Altos Hills, Town of	Carl Cahill (P)	Non-Active	-
Butte, County of	Grant Hunsicker (A)	Non-Active	-
Monterey, County of	Mario Salazar (P)	Non-Active	-
Sonoma, County of	John Haig (P)	Non-Active	-
Windsor, Town of	James McAdler (P)	Non-Active	-
Hayward Area Rec. District	Karl Zabel (P)	Non-Active	-
Housing Authority, County of Alameda	Christine Gouig (P)	Non-Active	-
Los Trancos County Water District	Keri Tate (P)	Non-Active	-
South County Fire Authority	Leon Churchill Jr. (P)	Non-Active	-
West County Wastewater District	Ken Cook (P)	Non-Active	-

ASSOCIATION OF BAY AREA GOVERNMENTS
Representing City and County Governments of the San Francisco Bay Area

SUMMARY MINUTES

ABAG POWER Board of Directors Meeting
October 26, 2017
Yerba Buena Conference Room
375 Beale Street, San Francisco, CA 94105

WELCOME AND INTRODUCTIONS
Chair Tonya Gilmore opened the meeting with introductions at 11:05 AM.

The agencies having a representative at this meeting were as follows:

Board Representatives Present	Jurisdiction/Agency
Katy Nomura	City of Cupertino
Dan Schoenholz	City of Fremont
Matthew Chidester	City of Half Moon Bay
Dave Brees	City of Los Altos
Khee Lim	City of Millbrae
Chris Schroeder	City of Milpitas
Pete Fong	City of Oakland
Tonya Gilmore	City of Orinda
Leonard Olive	City of Pleasanton
Angela Walton	City of Richmond
Thomas Ruark	City of Union City
Roland Rojas	City of Vallejo
Brian Balbas	County of Contra Costa
Steve Lederer	County of Napa
Doug Koenig	County of San Mateo
Brad Vance	County of Santa Clara
Jef Nazareno	Golden Gate Bridge, Highway & Transportation District
Danielle Thoe	Housing Authority of the City of Alameda
Johnson Ho	Vallejo Flood & Wastewater District

Board Representatives Absent	Jurisdiction/Agency
Liam Garland	City of Alameda
Penelope Leach	City of Albany
Cindy Mosser	City of Benicia
Rene Mendez	City of Gonzales
David Biggs	City of Hercules
Eric Erickson	City of Mill Valley
Debra Figone	City of Monte Sereno
Lorenzo Hines	City of Pacifica
Bill Mushallo	City of Petaluma
Michael Ricker	City of Salinas

Jay Walter	City of San Carlos
Kevin McGowan	City of San Rafael
Doug Williams	City of Santa Rosa
Thomas Scott	City of Saratoga
Gabriel Gordo	City of Watsonville
John Donlevy	City of Winters
Sean Brooks	Regional Administrative Facility Corporation
George Rodericks	Town of Atherton
Robert Priebe	Town of Moraga

Staff and Guests Present	**Organization**
Adrienne Weil	Metropolitan Transportation Commission (MTC)
Andy Fremier	MTC
Brad Paul	MTC
Cindi Segal	MTC
Courtney Ruby	MTC
Jennifer Berg	MTC
Jerry Lahr	MTC
Ryan Jacoby	MTC

CHAIR'S OPENING REMARKS

Chair Gilmore welcomed board members and provided a brief history and a general overview of the ABAG POWER program. She introduced and extended a special acknowledgement to the 2017-18 Executive Committee and ABAG POWER principal staff.

PUBLIC COMMENTS

There were no public comments.

APPROVAL OF SUMMARY MINUTES OF OCTOBER 19, 2016 ANNUAL BOARD MEETING

Motion was made by Schroeder/S/Brees/C/17:0:0 to approve as proposed the Summary Minutes of the October 19, 2016 Board of Directors meeting.

The aye votes were: Balbas, Brees, Chidester, Fong, Gilmore, Ho, Lederer, Lim, Nazareno, Nomura, Olive, Rojas, Ruark, Schoenholz, Schroeder, Thoe, Walton.

The nay votes were: None.

Abstentions were: None.

Absentees were: Biggs, Brooks, Donlevy, Erickson, Figone, Garland, Gordo, Hines, Koenig, Leach, McGowan, Mendez, Mosser, Mushallo, Priebe, Ricker, Rodericks, Scott, Vance, Walter, Williams.

ASSOCIATION OF BAY AREA GOVERNMENTS (ABAG)/MTC STAFF CONSOLIDATION

Ruby informed members of the vote in late May 2016 by the ABAG and MTC governance boards to support a full functional consolidation of staff and the pursuit of new governance options. Staff of

ABAG were consolidated under MTC effective July 1, 2017 pursuant to the ABAG-MTC Contract for Services, effective May 30, 2017. A copy of the Contract for Services was provided to attendees as a handout.

Lederer questioned whether there had been a financial impact to ABAG POWER as a result of the consolidation; Ruby confirmed a decrease in the overhead rate applied to staff.

ABAG-ABAG POWER Memorandum of Understanding (MOU)

Ruby and Lahr provided members with redlined changes made to the ABAG-ABAG POWER MOU since it was approved at POWER's May 31, 2017 Special Executive Committee meeting, noting that the agreement had yet to be executed by MTC on behalf of ABAG.

FINANCIAL REVIEW

Courtney Ruby, MTC's Director of Administration and Facilities, and previously ABAG's Interim Finance Director, presented the preliminary financial reports for the fiscal year ending June 30, 2017. She noted independent auditors were in the process of auditing year-end financial statements, which are expected to be available in December, 2017. Preliminary income statements indicated a total of approximately $0.86 million being classified as unearned energy revenues to be refunded to members in the Fiscal Year 2017-18 true-up allocation.

STAFF REPORT AND REVIEW OF NATURAL GAS PROGRAM

Lahr provided an in-depth report on the operations of the natural gas program for Fiscal Year 2016-17. He provided a review of the program and discussed program goals, long-term program achievements, and gas purchasing strategies.

ABAG POWER's blend of long-term and short-term gas purchases resulted in a weighted average cost of gas for the year of $3.02/Dth, representing a year-on-year increase of approximately 21%. ABAG POWER's annual weighted average price was approximately 3.3% higher than PG&E's similar total rate (G-NR1). Due to the program's levelized billing structure and layered purchasing strategy, ABAG POWER's monthly rates were more stable than PG&E's rates throughout the year.

NATURAL GAS PROGRAM RECOMMENDATIONS AND STRATEGY

Staff provided a review of the Natural Gas Aggregation Program's historical goals of Price Stability and Cost Savings, and the program's performance and means of meeting these goals. Staff provided several recommendations to improve the ability of ABAG POWER to meet its goals and provide ongoing benefits to members, including increasing usage/membership, modifying the gas purchasing strategy, and continuing to look for opportunities to add environmental initiatives.

ELECTION OF ABAG POWER EXECUTIVE COMMITTEE

Motion was made by Schroeder/S/Brees/C/19:0:0 to approve as proposed the ABAG POWER Executive Committee for program year 2017-18, including the election of chair and vice chair as follows:

Angela Walton, City of Richmond
Chris Schroeder, City of Milpitas
Dave Brees, City of Los Altos (Vice Chair)
Melissa Morton, Vallejo Flood & Wastewater District

Misty Mersich, City of Cupertino
Tonya Gilmore, City of Orinda (Chair)

[Representatives Koenig and Vance arrived prior to this vote.]

The aye votes were: Balbas, Brees, Chidester, Fong, Gilmore, Ho, Koenig, Lederer, Lim, Nazareno, Nomura, Olive, Rojas, Ruark, Schoenholz, Schroeder, Thoe, Vance, Walton.

The nay votes were: None.

Abstentions were: None.

Absentees were: Biggs, Brooks, Donlevy, Erickson, Figone, Garland, Gordo, Hines, Leach, McGowan, Mendez, Mosser, Mushallo, Priebe, Ricker, Rodericks, Scott, Walter, Williams.

APPOINTMENT OF ABAG POWER OFFICERS AND LEGAL COUNSEL

Staff noted the October 19, 2016 adoption of Resolution 01-16 which amended the ABAG POWER Bylaws such that:

1. The ABAG POWER Board of Directors or Executive Committee will appoint a President, Chief Financial Officer, and Secretary for ABAG POWER; and
2. Staff of the Association of Bay Area Governments (ABAG) were appointed to the above positions.

Lahr reminded members that as a result of the ABAG-MTC staff consolidation, the ABAG employees no longer exist in the positions adopted in the Bylaws, and that the references to ABAG employees must be updated.

Motion was made by Schroeder/S/Lederer/C/19:0:0 to approve as proposed the ABAG POWER Officers and Acting Legal Counsel for program year 2017-18, as follows:

Individual	Title	Appointment
Steve Heminger	Executive Director	President
Brian Mayhew	Chief Financial Officer	Chief Financial Officer
Gerald Lahr	Assistant Director, Energy Programs	Secretary
Adrienne Weil	General Counsel	Acting Legal Counsel

The aye votes were: Balbas, Brees, Chidester, Fong, Gilmore, Ho, Koenig, Lederer, Lim, Nazareno, Nomura, Olive, Rojas, Ruark, Schoenholz, Schroeder, Thoe, Vance, Walton.

The nay votes were: None.

Abstentions were: None.

Absentees were: Biggs, Brooks, Donlevy, Erickson, Figone, Garland, Gordo, Hines, Leach, McGowan, Mendez, Mosser, Mushallo, Priebe, Ricker, Rodericks, Scott, Walter, Williams.

SAN FRANCISCO BAY AREA REGIONAL ENERGY NETWORK (BAYREN)

Jennifer Berg, BayREN's Senior Program Manager, provided a portfolio overview of the ratepayer-funded energy efficiency programs, including accomplishments to date as well as ongoing collaborations with the City of Berkeley, the Bay Area Regional Collaborative, and the California Energy Commission.

ADJOURNMENT

Chair Gilmore adjourned the meeting at 1:36 PM.

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*Example of a motion – *[Member No. 1/S/Member No. 2/roll call vote/C/8:0:0]* means Member No.1 motions, seconded by Member No.2, after roll call vote, motion carries, 8 = "yes" votes, 0 = "no" votes and 0 = abstention.

ASSOCIATION OF BAY AREA GOVERNMENTS
Representing City and County Governments of the San Francisco Bay Area

DATE: October 25, 2018

TO: ABAG POWER Board of Directors

FROM: Gerald L. Lahr, Manager, ABAG POWER

RE: **Staff Report on 2017-2018 Natural Gas Program**

Summary

Natural gas prices remained relatively stable during most of 2017-18, although daily prices dropped during the winter and early spring months with prices ranging from $2.47/Dth to just above $3.40/Dth.[1] Prices rebounded modestly during the summer of this year to approximately $3.50, and have since returned to the low $3.00 range, and remain low by historic standards.

During the year ABAG POWER purchased approximately 25% of its gas with forward, fixed-price gas supply contracts, while additional amounts were purchased on the short-term market. The Program's gas costs ranged from a low of $2.49/Dth in February 2018 to a high of $3.41/Dth in September of 2017. ABAG POWER's blend of long-term and short-term gas purchases resulted in a weighted average cost of gas for the year of $2.84/Dth, representing a decrease of approximately 6% from the prior year. Ultimately, ABAG POWER's total annual weighted average price was approximately 7.5% higher than PG&E's similar total rate (GNR-1). Due to the Program's levelized billing structure and long-term purchasing strategy, ABAG POWER's monthly rates were more stable than PG&E's rates for the year.

Program Goals

Since 2002 the ABAG POWER Natural Gas Program has operated with the dual, and often competing, goals of *Cost Savings* and *Price Stability*.

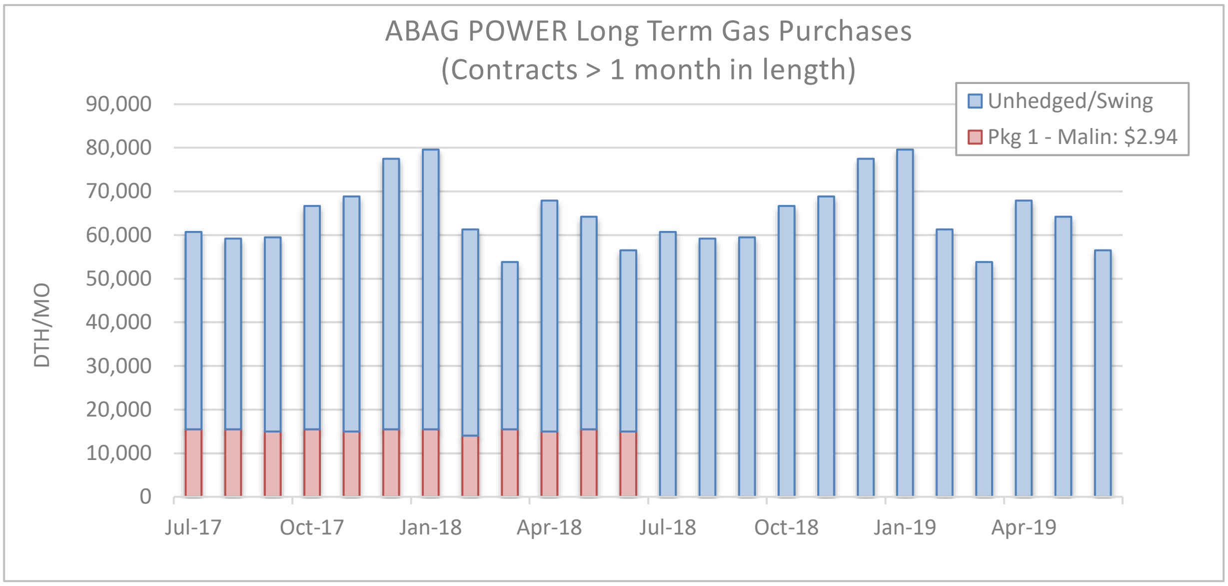
- **Price Stability.** It is desirable that the Program's purchasing strategy and costs allocation methods be such that will provide members a reasonable degree of certainty of the costs to be shared within any given program year.
- **Cost Savings.** Given the desire for price stability, the Program shall attempt to provide gas procurement services for less than the equivalent services provided by the default provider (i.e. PG&E).

To meet these goals the program had historically implemented a gas purchasing strategy that emphasized multiple layers of long-term, fixed-price contracts for a majority of its gas load, while the remaining portion of gas was purchased with short-term, indexed-based contracts. However, during FY 2016-17, the Executive Committee approved a staff recommendation to modify the gas purchasing strategy to purchase a majority of the program's gas in the shorter term market in order to take advantage of spot prices that may result in savings, while also locking in a moderate term, fixed-price

[1] Prices based on gas delivered to PG&E's distribution system ('PG&E Citygate').

contract to gain stability. In FY 2017-18, ABAG POWER continued to purchase a majority of its gas in the shorter term market.

The Executive Committee has continued to evaluate and modify the gas purchasing strategy in an effort to meet the program goals, including approving an additional staff recommendation to further modify the current gas purchasing strategy to move exclusively into the short-term index-based market, beginning July 1, 2018.



Fiscal Year 2017 – 18.

During the recently completed fiscal year, ABAG POWER purchased 25% of its gas with forward gas supply contracts.[2] The remaining gas requirements were purchased in monthly or daily blocks with the price tied to a market index.[3] The Program's gas costs ranged from a high of $3.41/Dth for daily gas in September 2017, to a low of $2.49/Dth for daily gas in February 2018. The Weighted Average Cost of Gas (WACOG) for the year was $2.84/Dth. The Natural Gas Program's net savings for the year ending June 30, 2017 was -7.5%.

The program's monthly levelized rate remained static throughout the year, as compared to PG&E's core procurement rate (commodity only) which ranged from $1.99 – 3.89/Dth.

Long Term Program Metrics.

ABAG POWER's average annual savings for the period July 2003 to June 2018 was -1.0% [4] (does not include proceeds from 2009 gas litigation settlement: $557,000). Throughout this period the

[2] Contracts greater than one month in length. Purchases staged throughout the year.
[3] National Gas Intelligence's (NGI's) monthly Bidweek index, or the Gas Daily's daily index for the appropriate delivery point.
[4] Compared to PG&E's GNR-1 rate.

Program's prices continued to be more stable than PG&E's. This is due to a strategy that relies more heavily on longer-term, fixed-price purchases, as well as the levelized billing system.

While ABAG POWER's fixed price contracts produce greater stability, and have avoided the significant price spikes seen over the past several years, at times these contract prices have been above the monthly and daily indices that are primarily followed by PG&E.

Operations and Billing.

Scheduling. ABAG POWER's gas scheduling agent remains DMJ Gas Marketing, which began providing services in July 2013.

The program continues to schedule deliveries to take advantage of the transportation capacity that PG&E allocates to the program, when possible. As discussed in prior years, due to regulatory changes implemented in April 2012, the rules regarding the allocation of PG&E's pipeline capacity and storage holdings have changed, and this has resulted in additional costs to the program. Several Core Transportation Agents (CTAs) have joined forces to petition the California Public Utilities Commission (CPUC) to revise these regulations so that programs such as ABAG POWER's are not burdened with stranded costs as a result of PG&E's pipeline capacity contracts. To date, the regulatory efforts related to pipeline capacity have been unsuccessful; however, CTAs have again requested relief from these regulations as part of PG&E's Gas Transmission & Storage (GT&S) Rate Case, which is currently being litigate before the CPUC. (See discussion below regarding PG&E storage allocation.) Additional discussion is included in the Canadian supply and transport memorandum.

Storage. Core aggregation programs such as ABAG POWER are required to maintain certain gas storage requirements throughout the year. For example, ABAG POWER is currently required to have approximately 650,000 therms of gas in storage at the start of the winter period (Nov. 1st). And, while ABAG POWER may meet this requirement by utilizing either PG&E storage or an independent storage provider, regulatory requirements currently stipulate that CTAs must pay for a portion of PG&E's storage capacity regardless of whether or not it is actually used. Because of this requirement to pay, ABAG POWER has used PG&E storage to meet its storage requirement in order to reduce stranded costs, even though alternate storage providers may be less expensive. However, due to prior regulatory efforts by CTAs, in 2018, the minimum percentage of PG&E storage required to be held by CTAs began to decline annually over a seven year period, ultimately transitioning to an option in 2025 for 100% self-management of storage through independent storage providers with no stranded costs. CTAs have asked the CPUC to expedite this transition, as part of PG&E's GT&S rate case.

Gas Purchase Agreements. ABAG POWER continues to seek out gas suppliers that may provide benefits to its portfolio. The program currently maintains master gas purchase contracts with the following suppliers:

- BP Energy
- Devlar Energy Marketing
- Macquarie Energy Group
- Occidental Energy Marketing, Inc. (subsidiary of Occidental Petroleum)

- Pacific Summit Energy (subsidiary of Sumitomo Corp.)
- Shell Energy North America
- United Energy Trading (UET)
- Utility Resource Solutions (Spark Energy)

Noncore. The ABAG POWER natural gas pool includes three large-usage (noncore) accounts. Natural gas for these accounts is scheduled separately, although it is allocated from the same pooled purchases. Storage costs are not assigned to noncore accounts, so these accounts receive a slightly lower rate.

Billing. ABAG POWER continues to provide "ESP Consolidated Billing" services for all core accounts utilizing Electronic Data Interchange (EDI) processing. Under this option members receive only one bill with both ABAG POWER and PG&E charges. EDI processing is not available for noncore accounts, so these are billed using the "Dual Billing" option. Under Dual Billing PG&E sends a separate bill with just transportation and miscellaneous charges (i.e. no commodity charge).

ABAG POWER maintains its own internal accounting system that provides for "levelized" billing. Every member is invoiced each month for an amount that represents $1/12^{th}$ of the annual cost estimate for that member. Along with the monthly levelized invoice, the program sends each member a detailed report showing the actual usage for each account. After the end of the fiscal year the actual costs for each member are compared to the levelized billings, and a credit or charge is then applied to true-up any difference.

Financial

The total cost of the natural gas program for 2017-18 decreased from the previous fiscal year by 5%: from $7.1 million to $6.8 million. This was primarily the result of slightly decreased gas commodity costs and gas consumption, which decreased from 7,007,361 therms to 6,884,193 (1.8%). A review of each major program cost element is summarized below:

Natural Gas Commodity Cost. The natural gas commodity cost decreased from $2.6 million in 2016-17 to $2.3 million for the 2017-18 program year. This total was roughly 15% below the originally budgeted amount of $2.7 million.

The commodity portion of program costs is composed of: (1) natural gas purchases from gas suppliers for monthly consumption, (2) shrinkage, (3) required storage, and (4) additional costs to transport the gas to PG&E's distribution system. The natural gas commodity costs represented 34% of the total program costs for the year.

PG&E Pass-through Costs.[5] A major cost of the natural gas program is the amount charged by PG&E for the distribution of natural gas to customers as well as other public benefit charges. These costs are charged by PG&E to all customers and are subject to regulation by the CPUC. During the past fiscal year these costs totaled approximately $4.1 million ($0.67/therm) representing a decrease

[5] PG&E costs for noncore accounts are paid by the agency directly to PG&E, and are therefore not included in ABAG POWER's financial reports.

from the prior year of approximately 3%. The relative impact of the PG&E pass-through costs was 60% of total program costs.

Program Expenses. The remaining costs of the program are the expenses for program management, billing services, gas scheduling and administrative support, including financial and legal services. The cost of these services was $392,520 or 6% of the total program cost, representing an increase of $47,464 or 14% when compared to 2016-17. The primary reason for this increase was an increase in audit fees due to a change of the audit firm to PricewaterhouseCoopers, which will provide annual financing and compliance audit services for MTC, ABAG, and ABAG's related entities, including POWER.

Working Capital Deposits. The ABAG POWER natural gas program agreement requires that each new member of the program provide a deposit equal to two times their estimated monthly charges (Working Capital Deposit). These funds are kept on deposit, and are refunded to members if they leave the program. The total deposit amount is generally reviewed on an annual basis to ensure the program has adequate cash reserves to meet all its payment obligations.

As of June 30, 2018 the gas program had total Working Capital Deposits of: $2,000,785 which represents 3.3 months' worth of currently budgeted expenditures. This is deemed sufficient, and as a result, additional working capital deposits are not anticipated during the current year.

Conclusion

Recently gas prices have fluctuated within the $2.50 - $3.50 range, and futures markets predict that these prices will be maintained for the next couple of years. Market volatility has remained modest in recent months, although by its nature, volatility is always difficult to predict, and while not anticipated, the program should be prepared to deal with more lasting price increases as seen during the hurricane year of 2005 and the oil market climb in 2008.

The goals of ABAG POWER's Natural Gas Program are to provide natural gas at a rate competitive with, or less than, the default provider (i.e. PG&E), while at the same time providing a rate that is stable and predictable. These goals require a balance between the need to have a substantial percentage of gas in long-term, fixed price contracts or other hedge instrument, and the desire not to lock the program into higher than market rates. In recent years, membership surveys have indicated that cost savings is 'very' important to member agencies, though in the context of compromising one goal to attain another, there is not a clear preference towards price stability or cost savings. Surveys have also indicated significant interest in sustainability initiatives, such as Renewable Natural Gas. Given this direction, the Executive Committee and staff have continued to evaluate the Program's purchasing strategy and program offerings to best maximize the goals of the Program.

During the coming year we will evaluate the program's performance in order to refine the gas purchasing strategy, and identify additional program offerings. ABAG POWER will also look for opportunities to aid members and their constituents in all areas of energy management, as can be seen in the energy efficiency efforts of the *San Francisco Bay Area Regional Energy Network* (BayREN).

We look forward to working with you during the coming year to make this program responsive to the needs of its member agencies.

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
2	**ABAG POWER Natural Gas Program**															
3	FY 2017-18 Monthly Summary of Operations															
4																
5				Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Total
7	**Gas Purchases[(1)]**															
8		Purchase 1	Qty	15,500	15,500	14,986	15,442	15,000	15,489	15,500	14,000	15,500	15,000	15,500	14,950	182,367
9			Price	$2.95	$2.95	$2.95	$2.95	$2.95	$2.95	$2.95	$2.95	$2.95	$2.95	$2.95	$2.95	
10		Purchase 2	Qty	15,500	15,500	14,664	15,436	15,000	15,487	15,500	14,000	15,500	15,000	15,500	14,930	182,017
11			Price	$2.73	$2.71	$2.70	$2.56	$2.69	$2.89	$2.61	$2.71	$2.23	$1.93	$1.94	$2.10	
12		Purchase 3	Qty	17,500	18,900	19,900	23,925	24,500	50,500	50,150	41,500	38,200	23,100	26,800	19,950	354,925
13			Price	$3.22	$3.28	$3.30	$3.15	$3.15	$2.93	$2.98	$2.74	$2.74	$2.70	$2.91	$3.01	
14		Purchase 4	Qty													0
15			Price													
16		Purchase 5	Qty													0
17			Price													
18		Total Quantity Purchased		48,500	49,900	49,550	54,803	54,500	81,476	81,150	69,500	69,200	53,100	57,800	49,830	719,309
19		Total Purchase Cost		$144,263	$149,683	$149,323	$160,329	$161,616	$238,407	$235,675	$192,861	$184,709	$135,405	$153,756	$135,358	$2,041,383
20		Backbone Shrinkage (Dths)		(372)	(372)	(369)	(412)	(360)	(373)	(372)	(336)	(372)	(360)	(372)	(383)	
21		WACOG[(2)]		$3.00	$3.02	$3.04	$2.95	$2.99	$2.94	$2.92	$2.79	$2.68	$2.57	$2.68	$2.74	$2.84
22																
23	**Storage/Inventory**															
24		Total Injections/ (Withdrawals)		8,736	9,010	9,060	8,602	6,080	(15,800)	(8,466)	(4,900)	(5,257)	0	0	7,085	14,150
25		Total Inventory Quantity (Dths)		30,659	39,669	48,729	57,331	63,411	47,611	39,145	34,245	28,988	28,988	28,988	36,073	
26		Total Inventory ($)		$96,221	$123,260	$150,639	$176,755	$194,679	$146,173	$120,182	$105,139	$89,000	$89,000	$89,000	$107,967	
27		Avg. Inventory Rate ($/Dth)		$3.14	$3.11	$3.09	$3.08	$3.07	$3.07	$3.07	$3.07	$3.07	$3.07	$3.07	$2.99	
28																
29	**Gas Program Monthly Expenses (from Financial Reports)**															
30		Cost of Energy Used[(3)]		$ 149,766	$ 153,725	$ 151,384	$ 165,949	$ 169,447	$ 318,630	$ 296,008	$ 249,234	$ 222,982	$ 155,373	$ 169,977	$ 137,731	$ 2,340,206
31		Program Operating Expenses[(4)]		26,674	35,792	26,058	23,303	31,555	41,283	18,132	27,885	26,162	16,678	24,344	64,682	362,549
32		Subtotal		$ 176,440	$ 189,517	$ 177,442	$ 189,252	$ 201,002	$ 359,913	$ 314,139	$ 277,120	$ 249,144	$ 172,051	$ 194,321	$ 202,413	$ 2,702,755
33		Rate ($/Dth)		$4.36	$4.68	$4.48	$4.11	$3.48	$4.47	$3.92	$3.87	$3.26	$2.92	$3.68	$4.63	$3.93
34																
35		PG&E Pass-through costs[(5)]		207,190	210,474	168,153	269,120	214,379	431,177	600,043	449,690	484,929	525,061	290,559	223,965	4,074,742
36		Total ABAG POWER Cost		$ 383,631	$ 399,991	$ 345,595	$ 458,372	$ 415,381	$ 791,091	$ 914,182	$ 726,810	$ 734,073	$ 697,112	$ 484,881	$ 426,378	$ 6,777,496
37																
38	**Actual (metered) Gas Usage**															
39		Core[(6)]		32,894	31,181	31,739	40,053	53,406	73,391	73,058	65,533	69,969	53,030	47,261	37,958	609,473
40		Non Core		7,544	9,336	7,885	5,947	4,394	7,148	7,141	5,992	6,403	5,923	5,517	5,717	78,946
41		Total Program Usage		40,438	40,517	39,624	46,000	57,800	80,539	80,199	71,524	76,372	58,953	52,778	43,674	688,418
42																
43	ABAG POWER Total Core Rate			$ 10.66	$ 11.43	$ 9.78	$ 10.83	$ 7.49	$ 10.34	$ 12.13	$ 10.74	$ 10.19	$ 12.82	$ 9.83	$ 10.54	
44																
45																
46	**PG&E Rate[(7)]**															
47		Procurement Charge[(8)]		3.03	3.12	2.56	2.99	3.25	3.59	3.56	3.89	3.05	3.31	2.54	1.99	
48		Transportation/Other Charge[(9)]		6.30	6.75	5.30	6.72	4.01	5.88	8.21	6.86	6.93	9.90	6.15	5.90	
49		Total PG&E Rate		$ 9.33	$ 9.87	$ 7.86	$ 9.71	$ 7.26	$ 9.47	$ 11.77	$ 10.75	$ 9.98	$ 13.22	$ 8.68	$ 7.89	
50																
51	**Monthly Index Postings**															
52		NGI Bidweek for PG&E Citygate		$3.25	$3.28	$3.34	$3.17	$3.19	$3.12	$2.86	$2.97	$2.76	$2.59	$2.65	$3.10	
53		Gas Daily Avg. for PG&E Citygate		$3.23	$3.28	$3.29	$3.13	$3.12	$2.92	$2.96	$2.70	$2.71	$2.68	$2.88	$3.00	
54		NGI Bidweek for Malin		$2.72	$2.70	$2.69	$2.55	$2.68	$2.88	$2.60	$2.70	$2.22	$1.92	$1.93	$2.09	
55																

	B / C / D	E	F	G	H	I	J	K	L	M	N	O	P	Q
2	**ABAG POWER Natural Gas Program**													
3	FY 2017-18 Monthly Summary of Operations													
4														
5		Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Total
56	**G-NR1 Rate Comparison**													
57	Monthly Rate Difference ($/Dth)	1.33	1.55	1.91	1.12	0.23	0.88	0.36	(0.02)	0.22	(0.40)	1.15	2.64	
58	Monthly Savings ($)	(43,784)	(48,476)	(60,730)	(45,009)	(12,135)	(64,336)	(25,994)	1,201	(15,166)	20,998	(54,203)	(100,284)	
59	Cumulative 'Savings' ($)	(43,784)	(92,260)	(152,990)	(197,999)	(210,134)	(274,471)	(300,465)	(299,264)	(314,430)	(293,432)	(347,635)	(447,919)	
62	Cumulative 'Savings' (%)	-14.3%	-15.0%	-17.7%	-15.8%	-12.8%	-11.7%	-9.4%	-7.7%	-6.8%	-5.5%	-6.1%	-7.5%	
63														
64	**Additional Rate Comparisons**													
65	G-NR2 Cumulative Savings	-17.8%	-18.5%	-21.5%	-19.4%	-16.6%	-15.5%	-12.8%	-11.0%	-10.1%	-8.7%	-9.3%	-10.7%	
70	G1 & GM Cumulative Savings	-12.4%	-7.0%	-6.3%	-3.0%	-0.2%	-2.2%	-0.4%	0.3%	-0.1%	0.6%	-0.8%	-1.5%	
75	G-NGV1 & G-NGV2 Cumulative Savings	-18.1%	-9.7%	-8.4%	-4.7%	-1.8%	-3.9%	-1.6%	-0.5%	-0.8%	0.1%	-1.2%	-1.9%	
80														
81														
82	Notes:													
83	(1) All gas quantities in Dth and rates in $/Dth. (Does not include imbalance purchases traded to storage.)													
84	(2) Weighted Average Cost of Gas (WACOG) at PG&E Citygate													
85	(3) Includes costs to transport gas to PG&E Citygate from alternate delivery points, as well as physical storage costs.													
86	(4) Includes scheduling fees, billing fees, administrative costs and misc. expenses; less interest income.													
87	(5) PG&E charges billed to ABAG POWER via EDI process and passed through to customers. These costs do not necessarily tie directly to the actual gas usage shown above due to timing difference in reporting.													
88	(6) From billing data													
89	(7) Based on PG&E's G-NR1 rate schedule.													
90	(8) Includes: Procurement Charge, Capacity Charge, Brokerage Fee, Shrinkage, and Storage.													
91	(9) PG&E Transportation Charge; Customer Charge, and surcharge for Public Purpose Programs. Does not include Franchise Fees and City Taxes.													
92														
93														
94														
95														

MEMORANDUM

ASSOCIATION OF BAY AREA GOVERNMENTS

Representing City and County Governments of the San Francisco Bay Area

DATE: October 25, 2018

TO: ABAG POWER Board of Directors

FROM: Gerald Lahr, ABAG POWER Manager

RE: Renewable Natural Gas Supply and Natural Gas Offset Products

Background

In recent years (2014 & 2017), staff has polled program participants to determine areas which areas of interest might add value to ABAG POWER. Renewable Natural Gas (RNG) and Energy Savings Assistance Programs have consistently ranked among the highest responses, in addition to electric vehicles and/or charging infrastructure and solar power.

In August 2018, ABAG POWER released a Request for Information (RFI) regarding the potential procurement for Renewable Natural Gas (RNG) and natural gas offset products or Renewable Natural Gas Attributes (RNGA). RNG provides various benefits to users, including:

- Reducing greenhouse gases by capturing methane that would otherwise escape, in turn assisting California meet its ambitious greenhouse gas goals
- Promoting the development of clean California-sourced energy that can take over many of the roles of traditional fossil fuels, further reducing greenhouse gases
- Serving as a consistent generation source of renewable energy, unlike variable production sources such as solar and wind

The purpose of the RFI was to assist staff in gathering necessary information for determining whether and how to add physical RNG and/or gas offset products, such as RNGA, as a voluntary offering for gas pool participants. In addition, the solicitation sought insight into how best to structure the procurements and resulting contractors, address potential challenges, and encourage qualified parties to propose on the procurements. The goal of a future procurement is to obtain reasonably priced products that help local governmental agencies achieve their sustainability and Climate Action Plan goals while also diversifying ABAG POWER and California’s fuel supplies.

The RFI was distributed to 15 entities including natural gas suppliers and marketers, utility infrastructure consultants, current carbon offset projects, and the nonprofit Coalition for Renewable Natural Gas. Two responses were received. Five questions were included in the RFP to assist ABAG POWER in obtaining meaningful feedback for inclusion in the preparation of future procurement documents. The questions and responses are provided on the following pages.

1. **Availability of RNG and RNGA**
   a. **Please provide your understanding of the availability of RNG and RNGA products in the California market.**
      i. ***Is RNG available to end customers through PG&E's gas distribution system? If not, how is the gas distributed and consumed?***

Respondent 1
Yes, PG&E customers may contract with third-party entities for the delivery of RNG via the distribution system. However, virtually all of the RNG delivered within the state of California, inclusive of deliveries made through the PG&E system, is produced outside of the state. It is important to note that PG&E does have a biomethane interconnection process which allows developers to gain access to their distribution system once certain specifications and qualifications are met. The challenge to developers is finding long-term offtake agreements for RNG with investment grade counter parties which enable project construction and operation. A core services supplier can deliver gas directly to an end use client within PG&E's system balancing deliveries with gas storage.

Respondent 2
Historically RNG has not been available through the PG&E gas distribution system. It is our understanding that PG&E is working with developers to provide delivery of RNG to California buyers. Currently PG&E has no buyers of RNG on their system.

      ii. ***Are existing state and federal monetary incentives sufficient to promote the growth of RNG? Are there programs other than California's Low Carbon Fuel Standard and the Environmental Protection Agency's Renewable Fuel Standard available to offset the higher costs of RNG?***

Respondent 1
The Renewable Fuel Standard (RFS) program currently provides sufficient monetary incentive to promote the development of RNG for use as a vehicle fuel through the generation and monetization of Renewable Identification Numbers (RINs). The RFS program is a federal program administered by the Environmental Protection Agency. The Low Carbon Fuel Standard (LCSF) program, administered by the California Air Resources Board (ARB), furthers the incentive for the development of RNG – provided the fuel is dispensed as vehicle fuel in California. Demand for RNG outside of vehicle fuel markets is driven by voluntary sustainability goals of corporations, institutions, and government entities.

Respondent 2
It is our understanding that aside from California incentives there are a number of programs that continue to provide incentive for acquisition of RNG. Such programs as North Carolina Utility Commission order for swine and poultry RNG, Existing state Renewable Energy Credit programs, and numerous corporate sustainability/carbon reduction goals drive the demand for RNG aside from the current California LCFS and PPA offers.

2. **Certification of RNG and RNGA**
   a. **Please describe any industry standard definitions for RNG and RNGA products.**

Respondent 1

"Biomethane" means landfill gas processed to pipeline quality by each Facility and injected into a common carrier natural gas pipeline, including all Environmental Attributes associated with such gas.

"Environmental Attributes" means any and all credits, benefits, emission reductions, offsets and allowances, howsoever entitled, attributable to the production and delivery of Biomethane. Environmental attributes including, without limitation:

- All credits, benefits, emission reductions, offsets and allowances attributable to the combustion of the Biomethane;
- Any certificates issued in relation to the Biomethane under a biofuel certification program;
- Any avoided emissions of carbon dioxide (CO2), methane (CH4), and other greenhouse gases (GHGs) attributable to the destruction of methane or the Biomethane that have been determined by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere, including all offset credits or other benefits issued, generated or retired in respect of such avoided emissions and including Lifecycle Greenhouse Gas Emissions;
- The ability to generate renewable energy credits/certificates or similar instruments in respect of the electricity generated from the combustion of Biomethane;
- Any and all avoided emissions of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants,
- Displacement or avoidance of any amount of conventional gas or fossil energy generation resources;
- Any renewable fuel attributes, including any Renewable Identification Numbers generated under the federal Renewable Fuel Standard and any credits generated under California's Low Carbon Fuel Standard;
- Any reporting rights of the foregoing; "Environmental Attributes" do not include any tax incentives.

Respondent 2

- *Biogas: a mixture of carbon dioxide (CO_2) and hydrocarbons, primarily methane (CH_4) gas, from the biological decomposition of organic materials.*
- *Syngas: a gas mixture composed primarily of hydrogen (H_2) and carbon monoxide (CO), along with hydrocarbons from the thermochemical decomposition of organic or inorganic materials.*
- *Conditioned Biogas: medium-BTU biogas that is stripped of some trace contaminants and water, but maintains the relative mix of carbon dioxide (CO_2) and methane (CH_4).*
- *Biomethane: biogas-derived, high-BTU gas that is predominately methane after the biogas is upgraded to remove most of the contaminants and a majority of the carbon dioxide (CO_2) and nitrogen (N_2) found in biogas.*

- *Renewable Natural Gas (RNG): biomethane that is upgraded to natural gas pipeline quality standards such that it may blend with, or substitute for, geologic natural gas.*
- *Renewable Compressed Natural Gas (R-CNG): RNG that is compressed to a high pressure, often for use as a transportation fuel.*
- *Renewable Liquefied Natural Gas (R-LNG): RNG that is converted to liquid form, often for use as a transportation fuel.*
- *Renewable Natural Gas Attribute (RNGA): A RNGA (Renewable Natural Gas Attribute) is a qualified natural gas green attribute (tradeable commodity) representing the environmental benefits of biogas. RNGA may be sold separate from biogas or RNG. 1*
- *RNGA is equal to 1 Million BTU (1 MMBTU)*

b. Please describe the process and protocols for certifying that the RNG and/or RNGA products meet the standards identified.

Respondent 1
Protocols for renewable energy certification will vary depending on the end use of the fuel. For RNG and RNGA used as vehicle transportation fuels, the process for verification is set forth by EPA under the RFS regulations and California Air Resources under the LCFS program. Each program provides extensive pathway certification procedures which include facility verifications, product testing, and final usage reporting. Respondent would be happy to provide ABAG with further information regarding our work in this area.

In addition to our EPA and ARB pathways, Respondent also offers products which are Green-e certified. These products provide verified renewable fuel resources to clients looking for alternative fuel resources to clients looking for alternative fuels for use outside of the vehicle transportation market. Green-e is a leading non-profit provider of clean energy and carbon offset certification. The organization, which is recommended and often required in leading environmental standards such as Leadership in Energy and Environmental Design (LEED), The Climate Registry, B Corporation, and others, has been providing independent renewable energy certification since 1997.

According to the Carbon Disclosure Project's (CDP) 2017 Climate Change Reporting Guidance, certified biogas used for voluntary purposes under CDP may be reported as "zero" emissions under Scope 1 use.

Respondent 2
Respondent has developed a proprietary protocol and associated set of affidavits and attestations that certify the renewable natural gas attribute. In addition to a developed protocol, respondent has a certified engineering report that confirms the commercial and technical pathways of the process.

3. **Pricing**
   a. **Provide available market price estimates for RNG and RNGA products. Please provide prices to PG&E Citygate or note alternate price location. Also, please note source of price estimates.**

Respondent 1
Generally, the value of RNG is driven by its value in the vehicle fuels market under the LCFS and RFS programs. The table below describes the commodity value of the natural gas and constituent credit revenues available within California on a per MMBtu basis.

Commodity Natural Gas	RIN Value/MMBtu	LCSF Credit Value/MMBtu	Total Value of RNG
$2.67	$25.80	$3.80	$32.27

Using landfill gas as the example, under RFS, each MMBtu of RNG used as a replacement vehicle fuel may generate 11.727 RINs. Using the July 2018 OPIS monthly average, each D3 RIN generated is valued at $2.20. This equates to an additional value of $25.80 attributable to RINs. When RNG is dispensed in California as vehicle fuel, LCSF credits may be earned at the approximate rate of 0.02 credits per MMBtu. At a current LCFS price of $180 this equates to an additional value of $3.80/MMBtu. Adding to this the commodity price of natural gas, $2.67/MMBtu PG&E CG July 2018, yields a total value of RNGA of $32.27 per MMBtu.

While this calculation is specifically for RNG used as vehicle fuel in California, ABAG must consider the market landscape when assessing potential purchase price.

However, we do understand that ABAG’s members will not necessarily be using RNG for vehicle fuel purposes. As noted above, Respondent can provide ABAG with alternative RNGA products developed to meet non-transportation sector needs at lower prices. These products provide cost effective and Green-e certified methods of providing renewable energy to clients.

In addition to RNG and RNGA offerings, Respondent is also able to provide clients with carbon offset products. Respondent is a wholesale provider of carbon offsets and most recently provided carbon offsets to neutralize the emissions associated with the City of Palo Alto’s natural gas usage under a similar program. Respondent’s diversified expertise and broad portfolio of products allows clients to customize carbon and environmental impact mitigation strategies.

Respondent 2
Respondent is only providing pricing for supply of unbundled renewable natural gas attributes delivered to the PG&E Citygate. The RNGAs are tagged to the current supply of natural gas, and are priced separately. The specifics of the purchase agreement will be defined in specific contract negotiations.

4. **Contract Terms**
    a. **Describe any known restrictive contract terms related to agreements to purchase RNG and/or RNGA products. E.g., maximum/minimum contract length, maximum/minimum purchase quantity, etc.**

Respondent 1
Any restrictions to the agreement would be addressed in the contract documents or applicable RFP.

Respondent 2
Respondent will work with ABAG POWER to develop a current term for supply of RNGA of 10 years with a current maximum supply of 4,300 dekatherms per day. Additional supply volumes are currently being developed and may be available by Q1 2019.

    b. **Provide an example of a purchase/sale agreement for RNG/RNGA products.**

Respondent 1
In general, Respondent standard forms of contract would include the below noted documents to deliver either RNGA or RNGA to ABAG:

- [Base Contract for Sale and Purchase of Natural Gas] NAESB
- Special conditions to the NAESB to be determined by the product delivered (RNG or RNGA)

Transaction Confirmation to be determined by the specifics of the delivery terms. The Transaction Confirmation would include term of contract, definitions, commercial terms, and other contractual details specific to the transaction.

Respondent 2
Confidential draft Purchase/Sale Agreement provided to staff.

5. **Other Information**
    a. **Please describe any quantitative information regarding the greenhouse gas reduction benefits provided by use of RNG as opposed to non-renewable natural gas.**

Respondent 1
As described in section 2b, RNG is considered a biogenic source of gas. Therefore, GHG reductions can be calculated on a 1:1 per MMBtu basis, where the combustion of RNG yields zero emissions and traditional natural gas emits 117 pounds of CO2 per MMBtu (according to the Energy Information Administration).

Respondent 2
“RNG produced from organic wastes can lead to GHG emission reductions by avoiding GHG emissions from waste management and displacing the use of fossil fuels in vehicles. Three main sources of GHG emissions across RNG’s life cycle as a vehicle fuel are energy use required to produce, process, and distribute the fuel for use in vehicles; combustion of RNG in the vehicle; and leaks of methane that can occur at all stages in the life cycle from production

through use GHG emissions that would have occurred under typical waste management but are prevented because the wastes are used to make RNG instead. For example, food waste used to produce RNG might otherwise be sent to a landfill where some methane would escape to the atmosphere and some would be captured and burned to convert most of the methane to carbon dioxide before it enters the atmosphere (that is, flared). Animal waste on a farm might otherwise be placed in an open lagoon that would emit methane. For example, some of the biogas produced could be used for power generation, displacing electricity from the grid."

Source: *The Production and Use of Renewable Natural Gas as a Climate Strategy in the United States. World Resources Institute, April 2018.*

b. Please describe any knowledge of existing programs or entities that plan to or are currently integrating RNG into a larger natural gas portfolio.

Respondent 1
Respondent's current portfolio of clients include progressive corporate compliance buyers, transportation agencies, California utilities, and obligated and regulated parties.

Respondent 2
Current RNG purchase by utilities in the U.S. market include such names as National Grid, Duke Energy, and DTE Energy. The Coalition for Renewable Natural Gas continues to see membership growth by gas authorities and municipalities that are either currently utilizing RNG or want to develop new programs with RNG. The coalition currently has more than a dozen utilities as active members. Utilities such as Duke Energy, DTE Energy, National Grid, Energy COOP, and Union Gas have established programs have procurement of RNG for supply of renewable natural gas within heir utility networks. Hawaii Gas has mandated that 100% of electricity generation be from renewable sources by 2045. These programs serve both residential, commercial, and industrial clients with qualified renewable natural gas at a premium over traditional natural gas. These programs serve those clients' goals of GHG emissions reductions and voluntary carbon neutrality.

c. What other recommendations or suggestions do you have that ABAG POWER should consider when procuring RNG and/or RNGA?

Respondent 1
- Term of contract – as described above – one of the biggest barriers to the development of RNG in California is the dearth of long-term offtake options for RNG.
- Competition for RNG within the vehicle fuels market in California – as illustrated in the table in 3a, RNG delivered to the California vehicle fuels transportation clients will have to provide an attractive option, which as noted above, may include contracts of longer duration.
- Program compliance standards – Respondent has extensive experience in delivering RNG to California; to provide an effective solution to ABAG, it would be essential to have clear guidance on what ABAG would consider compliant RNG for the purposes described in the RFI.

Respondent 2

Respondent would recommend to ABAG POWER the immediate purchase of renewable natural gas attributes while available since the current RNG market demands significant price premiums and limited availability. Respondent continues to see growth in the RNGA market as more and more utilities, municipalities, and a host of other gas buyers learn of the limited availability of the physical RNG product. We see the industrial market demand for RNG increase as market actors have procured their requirements for renewable electricity and have only to "green up" their natural gas supply.

d. What other recommendations or suggestions do you have to make a procurement of RNG and/or RNGA attractive to your firm?

Respondent 1

Respondent encourages ABAG to provide firms with the opportunity to bid for 10+ year offtake agreements and allow for multiple pricing and product approaches.

Respondent 2

Respondent believes their extensive work within the market of RNG and development of the only qualified program for supply of RNGA provides municipal power authorities the capability to mitigate cost. The unique ability of RNGA provides a product that can help governmental agencies achieve their sustainability and Climate Action Plan goals while also diversifying ABAG POWER and California's fuel supplies.

MEMORANDUM

ASSOCIATION OF BAY AREA GOVERNMENTS
Representing City and County Governments of the San Francisco Bay Area

DATE: October 25, 2018

TO: ABAG POWER Board of Directors

FROM: Gerald Lahr, ABAG POWER Manager

RE: Canadian Natural Gas Supply and Transport Agreements

Background

At its October 26, 2017 Board of Directors meeting, staff presented the ABAG POWER ("POWER") Board with several recommendations to improve the ability of POWER to meet its goals and provide ongoing benefits to its members, including modifying the gas purchasing strategy to move predominately into the short-term market. Thereafter, staff conducted additional analyses of historical fixed-price contracts and the potential purchase and transport of natural gas from locations within Canada. The analyses resulted in recommendations to move exclusively into the short-term market, and to move forward with identifying processes and reviewing agreements to allow for the purchase and transport of Natural Gas from Canada.

At its June 20, 2018 meeting, the POWER Executive Committee authorized the Metropolitan Transportation Commission Executive Director, or his designee, to negotiate and enter into necessary agreements to allow for the potential future purchase and transport of natural gas from locations within Canada, including:

1. Gas supply/purchase agreements with vendors demonstrating an ability and willingness to deliver gas at POWER's desired receipt points
2. Acceptance of ABAG POWER's pro-rata share of pipeline capacity along three pipelines: two within Canada and one ranging from the U.S.-Canada border to the California border
3. Customer Use Agreements with the above pipeline operators governing the use of electronic systems to manage acceptance of pipeline capacity and daily transportation nominations
4. International Import/Export Licenses:
    a. Short-Term Natural Gas Export License from Canada's National Energy Board
    b. Short-Term Natural Gas Removal Permit from Alberta's Energy Regulator
    c. Canadian Business Number and Goods and Services Tax (GST) Account
    d. Short-Term Authorization from the U.S. Department of Energy to Import Natural Gas

Gas Supply/Purchase Agreements

To enable the purchase of gas within Canada, staff has identified three suppliers (BP Canada Energy; Macquarie Energy Canada; Shell Energy Canada) with the ability and willingness to deliver gas at POWER's desired receipt points within Canada.[1] POWER has existing satisfactory business

[1] POWER anticipates taking delivery of gas at the AECO Hub in Alberta Canada.

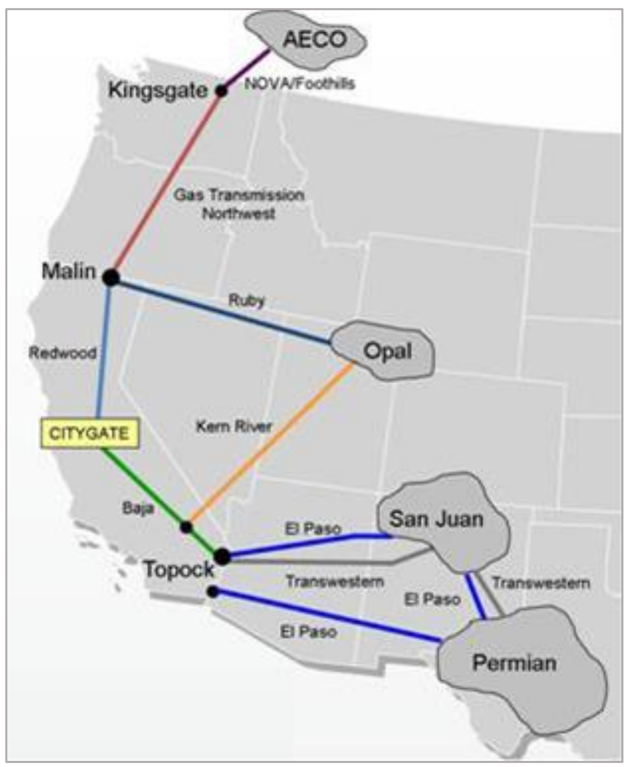
relationships with the U.S.-based operations for each entity; however, purchasing in Canada requires separate agreements with the suppliers' Canadian subsidiaries.

The general terms and conditions for these transactions are governed by an industry standard trading-partner agreement titled a Base Contract for Sale and Purchase of Natural Gas ("Base Contract"). Executing a Base Contract does not commit either party to a transaction, but puts in place that basic terms and conditions that will govern any future transaction. Individual gas purchase/sale transactions are initiated and governed by a bidding process in accordance with MTC's procurement and finance requirements. While these are not the only suppliers able to provide gas in Canada, staff finds it reasonable to select the recommended firms – BP Energy Canada, Macquarie Energy Canada, Shell Canada Energy – due to POWER's current relationship with the U.S.-based companies, to accelerate the ability to capitalize on comparatively low Canadian commodity prices.

Current Status: Staff are reviewing Base Contracts and have not yet executed agreements with suppliers.

Acceptance of Pipeline Capacity

Pacific Gas & Electric Company (PG&E) currently contracts for capacity on each of the pipelines necessary for the objective of transporting gas from Canada to the Bay Area. Every four months, PG&E offers POWER an allocation of the pro-rata share of the pipeline capacity it holds. For capacity offered and not accepted, PG&E attempts to recover costs through an auction but POWER retains full cost responsibility for the capacity offered to it.



Historically, POWER has elected to accept capacity on the Redwood pipeline; reject capacity on all the other pipelines; and then accept the program's share of the proceeds from PG&E's auction of the rejected capacity. However, the past few years have seen comparatively low Canadian gas prices at the AECO pricing point, and the proceeds from PG&E's auction of the associated pipeline capacity have not been sufficient to offset the price differential to PG&E delivery points.

It is advantageous for POWER to accept the capacity offered to it by PG&E rather than contract for its own capacity due to favorable terms associated with the PG&E capacity, i.e.: a shorter contract length (four months) and a lower contract rate.

As an option, staff is also reviewing agreements to re-sell POWER's allocation of PG&E's pipeline capacity. This option may allow POWER to gain the value of the capacity without entering into agreements for the actual transport of physical gas.

Current Status: Staff has elected to accept pipeline capacity on the Canadian (NOVA/Foothills) and interstate (Gas Transmission Northwest (GTN) pipelines for February 2019, and expects to use this capacity to ship gas for POWER's use beginning at that time. In mid-January, POWER will be offered the next opportunity to accept or reject capacity for March-June 2019.

Customer Use Agreements

In addition to electing to accept PG&E's capacity on a pipeline, POWER is required to execute two Customer Use Agreements ("CUAs") with TransCanada Corporation, the pipeline owner and operator for GTN, NOVA, and Foothills. The agreement enables electronic capacity assignment, gas scheduling, and accounting mechanisms. Two CUAs with TransCanada must be executed: one to govern the Canadian pipelines, and another with TransCanada U.S. to govern the use of GTN.

Current Status: Staff have reviewed and executed both required CUAs.

International Import/Export/Business Licenses

The U.S. Department of Energy's (DOE) Natural Gas Act prohibits the import or export of natural gas from or to a foreign country without prior approval from DOE. Parties who want to enter into natural gas transactions with foreign sellers and buyers must file for an import and/or export authorization under the rules and procedures found in DOE's regulations. Similarly, both Canada's National Energy Board (NEB) and Alberta's Energy Regulator require an application for an export license to remove natural gas. Each of these applications may be submitted as a request for "Short Term" blanket authorization for up to two years.

In addition to the authorization required to import and export natural gas, registration for a Canadian Business Number and a Goods and Services Tax (GST) account are required to remit the GST from taxable sales, such as re-selling POWER's pipeline capacity. The purchase and immediate export of natural gas from Canada to the United States does not qualify as a taxable sale.

Approved Applications:

- Short-Term Natural Gas Export License from Canada's National Energy Board
- Short-Term Authorization from the U.S. Department of Energy to Import Natural Gas

Applications Pending Determination:

- Canadian Business Number and Goods and Services Tax (GST) Account

Applications Not Yet Filed:

- Short-Term Natural Gas Removal Permit from Alberta's Energy Regulator (requires Business Number and GST account)

Canadian Jurisdiction

It is important to note that when entering into agreements with Canadian gas suppliers and pipeline companies, POWER will come under the jurisdiction of Canadian law for these specific transactions. POWER staff and counsel have reviewed the agreements, and believe that a dispute developing relative to the business POWER would transact pursuant to the agreements is unlikely. However, should such a dispute develop, it could require the retention of Canadian counsel and possible litigating of the dispute in the Canadian court system, which would likely be costly.

Next Steps

Staff and internal counsel are continuing to review agreements received to-date. External counsel with gas industry experience has also been engaged to review various agreements. Staff expects to have all necessary agreements in place by the end of the year in order to begin utilizing Canadian gas supply and/or pipeline capacity by February 1st.

Report to the Executive Committee
FY 2018 audit results

ABAG Publicly Owned Energy Resources

October 25, 2018

pwc

October 17, 2018

Dear Members of the Executive Committee of ABAG Publicly Owned Energy Resources:

We are pleased to submit our Report to the Executive Committee related to the results of our fiscal year 2018 audit of ABAG Publicly Owned Energy Resources ("POWER" or "Organization"). Our report includes a summary of the results of our audit work and other required communications.

This report has been prepared in advance of our meeting and prior to the completion of our procedures. Other matters of interest to the Executive Committee may arise that we will bring to your attention at our meeting.

We look forward to presenting this report, addressing your questions and discussing any other matters of interest. Please feel free to contact me at 415-377-4410 or ian.fleming@pwc.com with any questions you may have.

Very truly yours,

Ian Fleming
Engagement Partner

PricewaterhouseCoopers LLP, Three Embarcadero Center, San Francisco, CA 94111-4004
T: (415) 498 5000 F: (415) 498 7100

Table of contents

This report and the information that it contains is intended solely for the information and use of the Executive Committee or management, if appropriate, and should not be used by anyone other than these specified parties.

Executive summary

Executive summary

Status of our audit

- We have substantially completed our audits of the financial statements of POWER in accordance with accounting principles generally accepted in the United States of America as of and for the year ended June 30, 2018. Pending items include:
  - Keeping current procedures
  - Receipt of signed management representation letter
  - Receipt of final in-house counsel letter update and external counsel legal letters
  - Completion of certain audit procedures

Key events and transactions affecting the year

- ABAG Staff Consolidation with MTC and change in POWER management

Identified misstatements, recorded and unrecorded

- There were no identified misstatements as part of the audit or management's process

Highlights

- Audit has been substantially completed
- We have used final 2018 balances to update preliminary materiality
- Continued independence has been affirmed
- We did not identify any potential or known fraud, irregularities, or illegal acts

Audit results

Status of our audit

Remaining items to complete	Significant changes to the audit plan
We are in the process of completing the audit procedures in accordance with our audit plan to address the identified risks. Open items include: • Keeping current procedures • Receipt of signed management representation letters • Receipt of final in-house counsel letters and external counsel legal letters • Completion of certain audit procedures We expect to issue our unmodified report on the financial statements of the Organization on October 25, 2018.	We provided our planned audit approach, including our preliminary risk assessment, and related scoping considerations for FY2018 to the Audit Committee on August 6, 2018. Throughout the audit, we continuously evaluated the appropriateness of our audit strategy. There were no further significant changes to the planned audit approach.

Audit risks and results

Final audit plan

Significant risk

	Risk	Significant findings
⚠	Management override of controls – presumed risk under the auditing standards	None to report

⚠ Significant risk

Other required communications

Independence re-evaluation	There were no independence matters that occurred or were identified subsequent to our most recent independence affirmation provided to the Executive Committee.
Material uncertainties related to events and conditions (specifically going concern)	We are not aware of any material uncertainties that cast doubt on POWER's ability to continue as a going concern.
Other information in documents containing audited/reviewed financial statements	We did not identify any information that was materially inconsistent with the information in the financial statements.
Disagreements with management	There were no disagreements with management.
Consultation with other accountants	We are not aware of any consultations management has had with other accountants about significant accounting or auditing matters.
Difficulties encountered during the audit	There were no significant difficulties encountered during the audit.
Other material written communications	Appendix I includes a copy of management's representation letter.
Non-compliance with laws and regulations	We did not identify any instances of non-compliance with laws and regulations.
Fraud or Illegal acts	We did not identify any potential or known fraud, irregularities, or illegal acts.
Alternative accounting treatments	We did not identify any alternative treatments permissible under US GAAP for accounting policies and practices related to material items, including recognition, measurement, and presentation and disclosure.

Other required communications

Identified misstatements	There were no identified misstatements as part of the audit or management's close process.
Control deficiencies	We considered internal controls over POWER's financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinions on the financial statements but not for the purpose of expressing an opinion on the effectiveness of POWER's internal controls. Accordingly, we do not express an opinion on the effectiveness of POWER's internal control. In performing our audit, we identified no material weaknesses and did not become aware of any significant deficiencies.
Departure from standard report	We plan to issue an unmodified audit report.
Other matters	There were no other matters arising from the audit that are significant to the oversight of POWER's financial reporting process.
Quality of the organization's financial reporting	We have performed an evaluation of whether the presentation of the financial statements and the related disclosures are in conformity with the applicable financial reporting framework, including our consideration of the form, arrangement, and content of the financial statements (including the accompanying notes). We did not identify any instances of non conformity. We have evaluated management's anticipated application of accounting pronouncements that have been issued but are not yet effective and might have a significant effect on future financial reporting. We do not have any concerns as a result of our evaluation. We have evaluated the potential effect on the financial statements of significant exposures and risks, and uncertainties, such as pending litigation, that are disclosed in the financial statements. We did not identify any matters with a material potential effect. We have evaluated whether the difference between estimates best supported by the audit evidence and estimates included in the financial statements, which are individually reasonable, indicate a possible bias on the part of POWER management. We did not identify any areas of possible bias.

Appendices

Appendices

Appendix I – Management representation letter draft

METROPOLITAN
TRANSPORTATION
COMMISSION

Bay Area Metro Center
375 Beale Street, Suite 800
San Francisco, CA 94105
415.778.6700
www.mtc.ca.gov

October 25, 2018

PricewaterhouseCoopers LLP
3 Embarcadero Center
San Francisco, CA 94111
Attn: Filip Nowak

We are providing this letter in connection with your audits of the financial statements of the governmental activities, the business-type activities, the discretely presented component units, each major fund, the aggregate remaining fund information and the fiduciary funds of the Metropolitan Transportation Commission Government-wide ("MTC GW") as of and for the years ended June 30, 2018 and 2017 and the related notes to the financial statements, which collectively comprise MTC GW's financial statements for the purpose of expressing an opinion as to whether such financial statements present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, the discretely presented component units, each major fund, the aggregate remaining fund information and the fiduciary funds of MTC GW at June 30, 2018 and 2017, and were applicable, the respective changes in financial position and cash flows thereof and for the years then ended in conformity with accounting principles generally accepted in the United States of America.

We are also providing this letter in connection with your audits of the standalone financial statements for MTC GW's discretely presented component unit, Bay Area Headquarters Authority ("BAHA") as of and for the years ended June 30, 2018 and 2017 MTC GW's discretely presented component unit, Bay Area Infrastructure Financing Authority ("BAIFA") for the year ended June 30, 2018 and the related notes to the financial statements which comprise BAHA's and BAIFA's financial statements for the purpose of expressing an opinion as to whether such financial statements present fairly, in all material respects, the financial position of BAHA at June 30, 2018 and 2017 and BAIFA at June 30, 2018 and the changes in financial position and cash flows thereof and for the years then ended in conformity and 375 Beale Condominium Corporation (375 Beale Condo) for the year ended June 30, 2018 and the related notes to the financial statements with accounting principles generally accepted in the United States of America.

Further, we are providing this letter in connection with your audits of the Association of Bay Area Governments (ABAG), ABAG Publicly Owned Energy Resources (POWER), and ABAG Finance Authority for Nonprofit Corporations (FAN) for the year ended June 30, 2018 and the related notes to the financial statements which comprise these respective entities' financial statements for the purpose of expressing an opinion as to whether such financial statements present fairly, in all material respects, the financial position of the entities at June 30, 2018 and the changes in financial position and cash flows thereof and for the year then ended in conformity with accounting principles generally accepted in the United States of America.

We acknowledge and confirm that we have fulfilled our responsibility, as set out in our engagement letters of April 13, 2018, for the preparation and fair presentation in the individual financial statements of financial position, and, where applicable, changes in financial position and cash flows in conformity with generally accepted accounting principles, including the appropriate selection and application of accounting policies. For the purposes of this letter, the entities above are collectively referred to as "MTC" or "MTC entities".

Certain representations in this letter are described as being limited to those matters that are material. Items are considered material, regardless of size, if they involve an omission or misstatement of accounting information that, in the light of surrounding circumstances, makes it probable that the judgment of a reasonable person relying on the information would have been changed or influenced by the omission or misstatement. Materiality used for purposes of this letter is enclosed in Appendix 1 covered.

We confirm, to the best of our knowledge and belief, as of October 25, 2018, the date of your report, the following representations made to you during your audit(s):

1. The financial statements referred to above are fairly presented in conformity with accounting principles generally accepted in the United States of America ("GAAP"), and include all disclosures necessary for such fair presentation and disclosures otherwise required to be included therein by the laws and regulations to which MTC is subject. We have prepared the financial statements on the basis that the MTC is able to continue as a going concern. There are no conditions or events, considered in the aggregate, that raise substantial doubt about MTC's ability to continue as a going concern within one year after the date the financial statements are available to be issued.

2. We have made available to you:

   a. All financial records and related data.

   b. Unconditional access to persons within the entity from whom you have requested audit evidence.

   c. All minutes of the meetings of the Commission, committees of the Commission, the Boards, and Board committees of the MTC entities and summaries of actions of recent meetings for which minutes have not yet been prepared through the date of this letter. The most recent meetings held were:

      - Metropolitan Transportation Commission – 10/24/2018
      - Administration Committee – 10/10/2018
      - Bay Area Headquarters Authority (BAHA) – 09/26/2018
      - Bay Area Toll Authority – 10/24/2018
      - Bay Area Toll Authority (BATA) Oversight Committee – 10/10/2018
      - Bay Area Infrastructure Financing Authority (BAIFA) – 09/26/2018
      - 375 Beale Condo Corporation Board - 06/11/2018
      - Operations Committee – 10/12/2018
      - Programming and Allocations Committee – 10/10/2018
      - ABAG Administrative Committee – 10/12/2018
      - ABAG Executive Board – 09/20/2018
      - ABAG Finance Executive Committee – 09/20/2018
      - ABAG POWER Executive Committee – 10/25/2018

3. We have appropriately reconciled our books and records (e.g., general ledger accounts) underlying the financial statements to their related supporting information (e.g., sub ledger or third-party data). All related reconciling items considered to be material were identified and included on the reconciliations and were appropriately adjusted in the financial statements, as necessary. There were no material unreconciled differences or material general ledger suspense account items that should have been adjusted or reclassified to another account balance. There were no material general ledger

suspense account items written off to a balance sheet account, which should have been written off to an income statement account and vice versa. All intra**-entity** accounts have been eliminated or appropriately measured and considered for disclosure in the financial statements. The effect of interfund activity has been eliminated from the government-wide financial statements. However, interfund services provided and used are not eliminated in the process of consolidation.

4. There have been no communications from regulatory agencies concerning noncompliance with or deficiencies in financial reporting practices. We have shared with you the Government Finance Officers' Association's comments on MTC GW's financial statements for the fiscal year ended June 30, 2017.

5. There are no material transactions, agreements or accounts that have not been properly recorded in the accounting records underlying the financial statements.

6. The effects of the uncorrected financial statement misstatements and out-of-period adjustments summarized in the accompanying schedule Appendix 2 are immaterial, both individually and in the aggregate, to the financial statements taken as a whole. Additionally, management identified one classification error in the FY 2017 statement of cash flows for BATA. There was no net cash impact but a $20m outflow in the operating activities section should have been presented in the non capital financing section instead. Management determined that the qualitative impact of this item did not warrant a revision of the previously issued figures.

7. We acknowledge and confirm that we have fulfilled our responsibility, as set out in our engagement letters of April 13, 2018, for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error and we have disclosed to you all deficiencies in the design or operation of internal control over financial reporting of which we are aware. We have also disclosed to you which of these deficiencies we believe are significant deficiencies or material weaknesses in internal control over financial reporting.

8. We acknowledge our responsibility for the design and implementation of programs and controls to provide reasonable assurance that fraud is prevented and detected.

9. We have disclosed to you the results of our assessment of the risk that the financial statements may be materially misstated as a result of fraud and we have no knowledge of any fraud or suspected fraud affecting MTC involving:

   a. Management,
   b. Employees who have significant roles in internal control over financial reporting, or
   c. Others where the fraud could have a material effect on the financial statements.

10. We have no knowledge of any allegations of fraud or suspected fraud affecting MTC received in communications from employees, former employees, analysts, regulators, short sellers, or others. (As to items 8, 9 and 10, we understand the term "fraud" to mean those matters described in AICPA AU-C 240).

11. There have been no violations or possible violations of laws or regulations whose effects should be considered for disclosure in the financial statements or as a basis for recording a loss contingency.

12. MTC has no plans or intentions that may materially affect the carrying value or classification of assets and liabilities.

13. We have disclosed to you the identity of the MTC's related parties and all the related party relationships and transactions of which we are aware.

14. The following, if material, have been properly recorded or disclosed in the financial statements

    a. Relationships and transactions with related parties, as described in GASB Codification Section 2250 -*Additional Financial Reporting Considerations*, including sales, purchases, loans, transfers, leasing arrangements, and guarantees, and amounts receivable from or payable to related parties.

    b. Significant changes in estimates in accordance with GASB Codification Section 2250 - Additional Financial Reporting Considerations.

    c. Significant estimates and material concentrations known to management that are required to be disclosed in accordance with GASB 72, *Fair Value Measurement and Application.*

15. There are no Guarantees, whether written or oral, under which MTC is contingently liable.

16. MTC has satisfactory title to all owned assets, and there are no liens or encumbrances on such assets nor has any asset been pledged as collateral, except as disclosed in the financial statements.

17. Where an allocation estimate is used to recognize assets for construction/capital work in process, management has ensured the underlying assumptions, methods, procedures and the source and reliability of supporting data are reasonable and based on applicable guidance. The procedures and methods utilized in developing assumptions, estimates and judgments are appropriate and have been consistently applied in the periods presented. Any change is allocation in the current year was as a result of new facts and circumstances not previously known and as such was accounted for as a change in estimate.

18. MTC has complied with all aspects of contractual agreements that would have a material effect on the financial statements in the event of noncompliance.

19. Receivables recorded in the financial statements represent bona fide claims against debtors for sales or other charges arising on or before the balance sheet dates and are not subject to discount except for normal cash discounts. Receivables classified as current do not include any material amounts which are collectible after one year. All receivables have been appropriately reduced to their estimated net realizable values.

20. We have not violated any covenants of our debt instruments during any of the periods presented, and we disclosed to you all covenants and information related to how we determined compliance with the covenants.

21. We are responsible for all significant estimates and judgments affecting the financial statements. Significant estimates and judgments and their underlying assumptions, methods, procedures and the source and reliability of supporting data are reasonable and based on applicable guidance, are completely and appropriately disclosed in the financial statements, and appropriately reflect management's intent and ability to carry out specific courses of action, where relevant. The procedures and methods utilized in developing assumptions, estimates and judgments are appropriate and have been consistently applied in the periods presented. There have been no subsequent events which would require the adjustment of any significant estimate and related disclosures.

22. MTC has no unpaid claims of risks not covered by an insurer that should either be recorded as a liability or reported as a contingency.

23. Expenditure by external transit agencies is an eligibility requirement of the AB664 fund.

24. The Service Authority for Freeways and Expressways ("SAFE") revenue is a fee and not a tax and therefore this entity is appropriately classified as an enterprise fund.

25. Management has determined in consultation with counsel that the contract between the Bay Area Toll Authority ("BATA") and the patron for prepaid FasTrak toll monies establishes a legal restriction on the use of the patron's monies such that the monies may not be used by BATA for operating purposes.

26. Management has determined in conclusion with counsel that the contract between BATA and the Golden Gate Bridge Highway and Transportation District relating to the collection of FasTrak toll monies establishes a legal restriction on the use of the monies such that the monies may not be used by BATA for operating purposes.

27. The Memorandum of Understanding Regarding the Operation and Maintenance of Clipper Fare Collection System ("MOU") is a validly executed arrangement and is the basis by which MTC and the parties to the MOU are operating the Clipper Fare Collection System.

28. Management has concluded that the nature of ABAG membership dues is a fee charged to external users for goods or service. As such, ABAG is considered an enterprise fund.

29. Management has concluded that in consideration of the GASB Codification 2100 - *Defining the financial reporting entity*, ABAG, 375 Beale Condo, are not considered component units of MTC GW. Additionally, POWER, FAN, ABAG Pooled Liability Assurance Network, ABAG Comp Shared Risk Pool, and the San Francisco Bay Restoration Authority are not considered to be component units of ABAG.

30. We have appropriately implemented the provisions of GASB Statement No. 75 *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (GASB 75). We concluded that it was not practical, as defined by GASB 75, to determine the amounts of all applicable deferred inflows of resources and deferred outflows of resources related to OPEB for the prior periods presented.

31. Management has followed applicable laws and regulations in adopting, approving, and amending budgets.

32. The financial statements of MTC properly classify all funds and activities.

33. The financial statements of MTC include all component units and properly disclose all other related organizations.

34. All funds that meet the quantitative criteria in GASB Codification Section 2200 – *Comprehensive Annual Financial Report*, for presentation as major are identified and presented as such and all other funds that are presented as major are considered to be important to financial statement users, and therefore presented accordingly.

35. Net position components (restricted, assigned, committed, unassigned, nonexpendable, invested in capital assets, net of related debt; and unrestricted and fund balance reserves and designations) are properly classified and, if applicable, approved.

36. Expenses have been appropriately classified in or allocated to functions and programs in the statement of activities and the statement of revenues, expenses and changes in fund balances/net position, and allocations have been made on a reasonable basis.

37. Interfund, internal, and intra-entity activity and balances have been appropriately classified and reported.

38. Deposits and investment securities are properly classified in a category of custodial credit risk.

39. Capital assets, including infrastructure assets, are properly capitalized, reported, and, if applicable, depreciated.

40. We acknowledge our responsibility for the presentation of the *Required Supplementary Information, Other Supplementary Information*, and *Statistical Section* in accordance with prescribed guidelines. We believe such information, including its form and content, is fairly presented in accordance with applicable criteria, including those required by GASB. The methods of measurement or presentation have not changed from those used in the prior period. We have informed you about any significant assumptions or interpretations underlying the measurement or presentation of the information.

41. Assets and liabilities required to be measured at fair value were measured both on a recurring and nonrecurring basis at fair value in accordance with GASB Statement No. 72, Fair value measurement and application. The valuation was determined using an acceptable methodology applied on a consistent basis and taking into account reasonable assumptions, including highest and best use, non-performance risk and credit and liquidity risk adjustments. We classified and disclosed financial assets and liabilities in the financial statements as Level 1, Level 2 and Level 3 in accordance with GASB 72, including a description of inputs and information used to develop valuation techniques.

42. Special items are appropriately classified and reported.

43. Tax-exempt bonds issued have retained their tax-exempt status.

44. The actuarial valuations of the Miscellaneous Plan of Metropolitan Transportation Commission, MTC's defined-benefit other post-employment benefits healthcare plan obligations, and all other MTC pension and OPEB plans were determined using acceptable methodologies applied on a consistent basis and taking into account the individual characteristics of the plans and reasonable assumptions, including those for the discount rates, rates of return on plan assets, mortality rates and other demographic assumptions.

45. We are responsible for compliance with the laws, regulations, and provisions of contracts and grant agreements applicable to us.

46. We are responsible for establishing and maintaining effective internal controls over financial reporting.

47. We are responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America.

48. We are responsible for compliance with the laws, regulations, and provisions of contracts and grant agreements applicable to us.

49. We have identified and disclosed to you all instances that have occurred or are likely to have occurred, of fraud and noncompliance with provisions of laws and regulations that have a material effect on the financial statements, and any other instances that warrant the attention of those charged with governance.

50. We have identified and disclosed to you all instances that have occurred or are likely to have occurred, of noncompliance with provisions of contracts and grant agreements that has a material effect on the determination of financial statement amounts.

51. We have identified and disclosed to you all instances that have occurred or are likely to have occurred of abuse that could be quantitatively or qualitatively material to the financial statements.

52. We are responsible for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

53. We acknowledge our responsibility for the design, implementation, and maintenance of internal controls to prevent and detect fraud.

54. We have taken timely and appropriate steps to remedy fraud, illegal acts, violations of provisions of contracts or grant agreements, or abuse that you report.

55. We have a process to track the status of audit findings and recommendations.

56. We have identified for you previous financial audits, attestation engagements, and other studies related to the audit objectives and whether related recommendations have been implemented.

57. We have provided views on your reported findings, conclusions, and recommendations, as well as management's planned corrective actions, for the report.

58. We acknowledge our responsibilities as they relate to nonaudit services performed by you and assume all management responsibilities. We oversee the services by designating an individual within senior management who possesses suitable skills, knowledge, or experience and we evaluate the adequacy and results of the services performed. We accept responsibility for the results of the services.

With respect to the federal awards program applicable to MTC entities

I. We are responsible for complying, and have complied, with the requirements of the Uniform Guidance.

II. We are responsible for understanding and complying with the requirements of federal statutes, regulations, and the terms and conditions of federal awards related to each of our federal programs.

III. We are responsible for establishing and maintaining, and have established and maintained, effective internal control over compliance for federal programs that provides reasonable assurance that we are managing federal awards in compliance with federal statutes, regulations, and the terms and conditions of the federal award that could have a material effect on our federal programs.

IV. We acknowledge and understand our responsibility for the presentation of the schedule of expenditures of federal awards in accordance with the Uniform Guidance and we believe such information, including its form and content, is fairly presented in accordance with the Uniform Guidance. We have included expenditures made during the period being audited for all awards provided by federal agencies in the form of grants, federal cost-reimbursement contracts, loans, loan guarantees, property (including donated surplus property), cooperative agreements, interest subsidies, insurance, food commodities, direct appropriations, and other assistance. The methods of measurement or presentation have not changed from those used in the prior period. We have informed you about any significant assumptions or interpretations underlying the measurement or presentation of the schedule of expenditures of federal awards.

V. We have identified and disclosed to you all of our government programs and related activities subject to the Uniform Guidance compliance audit.

VI. We have identified and disclosed to you the requirements of federal statutes, regulations, and the terms and conditions of federal awards that are considered to have a direct and material effect on each major program.

VII. We have made available all contracts and grant agreements (including amendments, if any) and any other correspondence relevant to federal programs and related activities that have taken place with federal agencies or pass-through entities.

VIII. We have identified and disclosed to you all amounts questioned and all known noncompliance with the direct and material compliance requirements of federal awards or stated that there was no such noncompliance.

IX. We believe that we have complied with the direct and material compliance requirements.

X. We have made available to you all documentation related to compliance with the direct and material compliance requirements, including information related to federal program financial reports and claims for advances and reimbursements.

XI. We have provided to you our interpretations of any compliance requirements that are subject to varying interpretations.

XII. We have disclosed to you any communications from federal awarding agencies and pass-through entities concerning possible noncompliance with the direct and material compliance requirements, including communications received from the end of the period covered by the compliance audit to the date of the auditor's report.

XIII. We have disclosed to you the findings received and related corrective actions taken for previous audits, attestation engagements, and internal or external monitoring that directly relate to the objectives of the compliance audit, including findings received and corrective actions taken from the end of the period covered by the compliance audit to the date of the auditor's report.

XIV. We are responsible for taking corrective action on audit findings of the compliance audit and have developed a corrective action plan that meets the requirements of the Uniform Guidance.

XV. We have provided you with all information on the status of the follow-up on prior audit findings by federal awarding agencies and pass-through entities, including all management decisions.

XVI. We have disclosed the nature of any subsequent events that provide additional evidence with respect to conditions that existed at the end of the reporting period that affect noncompliance during the reporting period.

XVII. We have disclosed all known noncompliance with direct and material compliance requirements occurring subsequent to the period covered by your report or we have stated that there were no such known instances.

XVIII. We have disclosed whether any changes in internal control over compliance or other factors that might significantly affect internal control, including any corrective action taken by management with regard to significant deficiencies and material weaknesses in internal control over compliance, have occurred subsequent to the period covered by the auditor's report.

XIX. Federal program financial reports and claims for advances and reimbursements are supported by the books and records from which the basic financial statements have been prepared.

XX. The copies of federal program financial reports provided to you are true copies of the reports submitted, or electronically transmitted, to the federal agency or pass-through entity, as applicable.

XXI. We have monitored subrecipients, as necessary, to determine that they have expended subawards in compliance with federal statutes, regulations, and the terms and conditions of the subaward and have met the other pass-through entity requirements of the Uniform Guidance.

XXII. We have issued management decisions for audit findings that relate to federal awards we make to subrecipients and that such management decisions are issued within six months of acceptance of the audit report by the Federal Audit Clearinghouse. Additionally, we have followed-up ensuring that the subrecipient takes timely and appropriate action on all deficiencies detected through audits, on-site reviews, and other means that pertain to the federal award provided to the subrecipient from us.

XXIII. We have considered the results of subrecipient audits and have made any necessary adjustments to our own books and records.

XXIV. We have charged costs to federal awards in accordance with applicable cost principles.

XXV. We are responsible for, and have accurately prepared, the summary schedule of prior audit findings to include all findings required to be included by the Uniform Guidance.

XXVI. The reporting package does not contain protected personally identifiable information.

XXVII. We have accurately completed the appropriate sections of the data collection form.

XXVIII. We have disclosed all contracts or other agreements with service organizations.

To the best of our knowledge and belief, no events have occurred subsequent to the balance sheet date and through the date of this letter that would require adjustment to or disclosure in the aforementioned financial statements.

Steve Heminger – Executive Director

Brian Mayhew – Chief Financial Officer

Arleicka Conley – Section Director, Finance & Accounting

Debbie Atmaja – Assistant Director/Financial Reporting

Suzanna Bode – Accounting Manager

Appendix 1

Materiality Levels

Fund Name	Materiality ($)
MTC General	175,000
AB664	371,000
STA	436,000
Rail Reserves	84,000
BART Car Exchange	772,000
MTC Non Major	16,000
Gov Activities / Fund 299 (A)	561,000
BATA	755,000
Clipper	89,000
SAFE	21,000
BAHA	482,000
BAIFA	18,000
TDA / AB1107 / Clipper	443,000
ABAG	67,000
ABAG Non major	190
POWER	13,000
FAN	1,900
375 Beale Condo Corporation	8,100

Appendix 2

Preliminary SUM items

Funds affected

FY 2018 SUM Entries - Business Type:

Entries	Reason	BATA	Clipper	SAFE	Business-Wide
DR/CR Operating Expenses	To correct expenses pertaining to FY 2108 that were not booked	$ 1,995,583	$ -	$ -	**$ 1,995,583**
CR/DR Accounts Payable		$ 1,995,583	$ -	$ -	**$ 1,995,583**

Total of Prior Year out-of-period adjustments:

	Reason	BATA	Clipper	SAFE	Business-Wide
DR/CR Income statement	To correct transactions pertaining to FY2017 that were subsequently booked in FY2018.	$ (6,412,461)	$ (308,047)	$ (101,996)	**$ (6,822,504)**
Net P/L Impact of Uncorrected Misstatements (rollover):		$ (4,416,878)	$ (308,047)	$ (101,996)	**$ (4,826,921)**

Financial Statements Metrics:

	BATA	Clipper	SAFE	Business-Wide
Operating Revenues	$ 755,729,337	$ 22,948,430	$ 6,705,582	$ 785,383,349
Operating Expenses	$ 168,219,801	$ 36,327,062	$ 10,568,893	$ 215,115,756
Non-operating Revenues (Expenses)	$ (630,760,866)	$ 2,834,077	$ 7,109,807	$ (620,816,982)
Transfers	$ (32,883,977)	$ 16,479,572	$ (737,565)	$ (17,141,970)
Change in Net Position	$ (76,135,307)	$ 5,935,017	$ 2,508,931	$ (67,691,359)
Total current assets	$ 1,001,096,640	$ 20,198,207	$ 28,084,562	$ 1,049,379,409
Total non-current assets	$ 1,812,888,649	$ -	$ 1,129,743	$ 1,814,018,392
Total Deferred Outflows	$ 841,036,382	$ 1,008,479	$ 300,869	$ 842,345,730
Total current liabilities	$ 370,125,649	$ 7,710,687	$ 935,719	$ 378,772,055
Total non-current liabilities	$ 10,001,449,920	$ 2,437,580	$ 743,726	$ 10,004,631,226
Total Deferred Inflows	$ 934,664	$ 185,212	$ 57,664	$ 1,177,540
Total Net Position	$ (6,717,488,562)	$ 10,873,207	$ 27,778,065	$ (6,678,837,290)

Preliminary SUM items

Funds affected

FY 2018 SUM Entries - Governmental Funds:

Entries	Reason	MTC General	AB664	STA	Rail Reserves	BART Car	Non-Major	GW
DR/CR Operating Expenses	To correct expenses pertaining to FY 2018 that were not booked							$ -
CR/DR Accounts Payable								$ -

Total of Prior Year out-of-period adjustments:

	Reason	MTC General	AB664	STA	Rail Reserves	BART Car	Non-Major	GW
DR/CR Income statement	To correct transactions pertaining to FY2017 that were subsequently booked in FY2018	$ -	$ -		$ (414,840)		$ (49,040)	$ **(463,880)**
Net P/L Impact of Uncorrected Misstatements (rollover):		$ -	$ -	$ -	$ (414,840)	$ -	$ (49,040)	$ **(463,880)**

Financial Statements Metrics:

	MTC General	AB664	STA	Rail Reserves	BART Car	Non-Major	GW
Total Revenues	$ 78,884,559.00	$ 2,474,839.00	$ 218,325,209.00	$ 700,978.00	$ 4,335,949.00	$ 8,384,209.00	$ 303,747,937.00
Total Expenditures	$ 87,823,801.00	$ 9,552,966.00	$ 172,215,346.00	$ 9,821,602.00	$ 4,875.00	$ 1,402,431.00	$ 279,625,929.00
Total Assets	$ 73,107,500.00	$ 185,757,363.00	$ 150,338,138.00	$ 42,181,869.00	$ 386,108,863.00	$ 87,713,309.00	$ 930,919,647.00
Total Deferred Outflows	$ -	$ -	$ -	$ -	$ -	$ -	$ 12,929,215.00
Total Liabilities	$ 26,694,522.00	$ 1,107,675.00	$ 73,314,782.00	$ 775,508.00	$ -	$ 530,010.00	$ 138,844,773.00
Total Deferred Inflows	$ -	$ 168,704,508.00	$ -	$ 135,777,134.00	$ -	$ 40,033,137.00	$ 346,792,795.00
Total Fund Balance	$ 46,412,978.00	$ 15,945,180.00	$ 77,023,356.00	$ (94,370,773.00)	$ 386,108,863.00	$ 47,150,162.00	$ 458,211,294.00

ABAG POWER
Publicly Owned Energy Resources

Financial Statements
For the Year Ended June 30, 2018

ABAG Publicly Owned Energy Resources
Table of Contents
For the Year Ended June 30, 2018

Report of Independent Auditors

To the Members of the Executive Committee of
ABAG Publicly Owned Energy Resources:

We have audited the accompanying financial statements of ABAG Publicly Owned Energy Resources ("POWER"), which consist of the statement of net position as of June 30, 2018, and the related statements of revenues, expenses and changes in net position and of cash flows for the year then ended.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to POWER's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of POWER's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of ABAG Publicly Owned Energy Resources as of June 30, 2018, and the changes in its financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter

The accompanying management's discussion and analysis ("MD&A") on pages 3 through 6 is required by accounting principles generally accepted in the United States of America to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

DRAFT
San Francisco, California
October 25, 2018

ABAG Publicly Owned Energy Resources
Financial Statements as of June 30, 2018
Management's Discussion and Analysis (unaudited)

Management's Discussion and Analysis

ABAG Publicly Owned Energy Resources (POWER) has prepared its financial report for the fiscal year ending June 30, 2018. This Management's Discussion and Analysis (MD&A) provides an overview of POWER's financial activities during the fiscal year and should be read in conjunction with the financial statements and the notes which follow.

A. Financial Highlights

1. Total gas usage during fiscal year 2017-18 was approximately 6.97 million therms, which was a decrease of approximately 13 thousand therms than fiscal year 2016-17.

2. POWER's revised strategy for purchasing natural gas consists of 25% of purchases were with fixed-price contracts of greater than one month in length with the remainder of the program's gas requirements filled with monthly and daily index-based purchases. This combination produced a year end weighted average price approximately 7.5% higher than the PG&E rate schedule (GNR-1).

3. POWER serves a total of 762 core accounts and three non-core accounts as of June 30, 2018

4. In fiscal year 2018 there was an excess of revenues over expenses in the amount of $673,737, which will be returned to the members as true-up adjustments in billings during the next fiscal year.

B. Overview of the POWER Financial Statements

POWER's financial statements include *Statement of Net Position, Statement of Revenues, Expenses and Changes in Net Position, and Statement of Cash Flows.* The financial statements are prepared in accordance with accounting principles generally accepted in the United States of America.

The *Statement of Net Position* report assets, liabilities and the difference as net position. The *Statement of Revenues, Expenses, and Changes in Net Position* consist of operating revenues and expenses and non-operating revenues and expenses. *Statement of Cash Flows* is presented using the direct method.

The *Statement of Net Position, Statement of Revenues, Expenses and Changes in Net Position, and Statement of Cash Flows* are presented on pages 7 – 9 of this report.

ABAG Publicly Owned Energy Resources
Financial Statements as of June 30, 2018
Management's Discussion and Analysis (unaudited)

C. Financial Analysis

Statement of Net Position

The following table is a summary of POWER's statement of net position as of June 30 for the last two fiscal years:

	2018	2017
Assets		
Cash and investment	$ 2,451,264	$ 2,850,549
Receivables	313,881	257,329
Natural gas inventory	107,967	69,384
Total assets	2,873,112	3,177,262
Liabilities		
Current liabilities	872,327	1,176,477
Noncurrent liabilities	2,000,785	2,000,785
Total liabilities	$ 2,873,112	$ 3,177,262
Net position	$ -	$ -

Cash and investments decreased by $399,285 from fiscal year 2017 to fiscal year 2018. The decrease was due to the true-up usage adjustment for 2017 which was in favor of the members.

Receivables increased by $56,552 in fiscal year 2018, due to higher outstanding invoices compared to fiscal year 2017.

The total liabilities were $2,873,112 at June 30, 2018, a decrease of $304,150 from June 30, 2017. The decrease in current liabilities is due to less outstanding vendor invoices and a lower true-up usage adjustment payable to the members at the end of fiscal year 2018

The non-current liabilities which represented deposits from members, remains the same for both fiscal year 2018 and 2017 because there was no change in the membership during fiscal year 2018.

The net position remained at zero at June 30, 2018. POWER's financial reporting model reflects all surpluses and deficits as liabilities to or receivables from its members.

ABAG Publicly Owned Energy Resources
Financial Statements as of June 30, 2018
Management's Discussion and Analysis (unaudited)

Statement of Revenues, Expenses, and Changes in Net Position

The following table is a summary of POWER's statement of revenues, expenses, and changes in net position for the last two fiscal years ended June 30:

	2018	2017
Operating revenue		
Sale of natural gas & other revenue	$ 6,777,496	$ 7,113,416
Total operating revenue	6,777,496	7,113,416
Operating expenses		
Cost of natural gas & PG&E passthrough	6,414,948	6,798,891
Salaries and benefits	208,208	205,330
Professional fees	75,697	23,841
Other expenses	108,615	106,456
Total operating expenses	6,807,468	7,134,518
Operating loss	(29,972)	(21,102)
Nonoperating revenue		
Interest income	29,972	21,102
Total nonoperating revenue	$ 29,972	$ 21,102
Changes in net position	-	-
Net position - beginning	-	-
Net position - ending	$ -	$ -

Total operating revenues were $6,777,496 in fiscal year 2018, a decrease of $335,920 compared to last fiscal year. The decrease was due to less usage of natural gas by members.

Total operating expenses for the fiscal year 2018 were $6,807,468, a decrease of $327,050 from the prior year. The decrease was due to lower quantity of gas purchases. The increase in the professional fees is the result of higher audit fees.

The nonoperating revenue was $29,972 in fiscal year 2018, an increase of $8,870 due to higher interest rates for cash held in the LAIF account.

D. Notes to the Financial Statements

The notes to the financial statements, beginning on page 10, provide additional information essential to a full understanding of the data provided in this MD&A and the financial statements that follow.

E. Economic Factor and Program Outlook for Fiscal Year 2019

POWER's futures contracts gas prices expects to remain in the \$3.00 - \$3.50/dth range for the next couple of years. This reflects a situation where gas supply is generally expected to exceed demand.

However, there are many factors that can cause significant gas price volatility, including abnormal weather patterns, increased demand from industry and/or gas powered electric generators, restrictions in gas transportation capacity and/or imports, the price of oil, regulatory actions, political instability and the rise of gas exports. In addition, an increased focus on environmental issues has initiated regulatory actions that emphasize the use of electricity over natural gas potentially lowering the demand for gas appliances, and thus moderating gas costs. Conversely, regulatory actions also have the potential to increase costs for using petroleum products, including natural gas. The business objective of POWER is to offer a reliable energy source at stable prices, but not necessarily the lowest price. The program is deemed to be even more valued during periods of uncertainty.

Request for Information

This financial report is intended to provide citizens, taxpayers, and creditors with a general overview of POWER's finances. Questions about this report should be addressed to the Chief Financial Officer, ABAG Publicly Owned Energy Resources, 375 Beale Street, Suite 800, San Francisco, CA 94105.

ABAG Publicly Owned Energy Resources
Statement of Net Position
June 30, 2018

ASSETS	
Current assets:	
Cash	$ 296,070
Investments	2,155,194
Accounts receivable	303,636
Interest receivable	10,245
Natural gas inventory	107,967
TOTAL ASSETS	2,873,112
LIABILITIES	
Current liabilities:	
Accounts payable	167,814
Due to other government	30,776
Unearned revenue	673,737
Total current liabilities	872,327
Non-current liabilities:	
Deposits from members	2,000,785
Total non-current liabilities	2,000,785
TOTAL LIABILITIES	2,873,112
NET POSITION	$ -

See accompanying notes to financial statements

ABAG Publicly Owned Energy Resources
Statement of Revenue, Expenses and Changes in Net Position
For the Year Ended June 30, 2018

OPERATING REVENUE	
Sale of natural gas	$ 6,768,183
Other operating revenues	9,313
TOTAL OPERATING REVENUE	6,777,496
OPERATING EXPENSES	
Cost of natural gas	2,340,206
PG&E Passthrough	4,074,742
Salaries and benefits	208,208
Professional fees	75,697
Overhead	99,347
Other	9,268
TOTAL OPERATING EXPENSES	6,807,468
OPERATING LOSS	(29,972)
NONOPERATING REVENUE	
Interest income	29,972
TOTAL NONOPERATING REVENUE	29,972
CHANGE IN NET POSITION	-
TOTAL NET POSITION - BEGINNING	-
TOTAL NET POSITION - ENDING	$ -

See accompanying notes to financial statements

ABAG Publicly Owned Energy Resources
Statement of Cash Flows
For the Year Ended June 30, 2018

Cash flows from operating activities	
Cash receipts from users and others	$ 6,540,378
Cash payments to suppliers and employees for services	(6,965,214)
Net cash used in operating activities	(424,836)
Cash flows from investing activities	
Proceeds/ transfer from maturity of investments	400,000
Net cash provided by investing activities	400,000
Net decrease in cash	(24,836)
Balances- beginning of year	320,906
Balances - end of year	$ 296,070

Reconciliation of operating income to net cash used in operating activities	
Operating loss	$ (29,972)
Net effect of changes in:	
Due to Metropolitan Transportation Commission	7,475
Unearned revenue	(184,987)
Accounts receivable	(52,131)
Natural gas inventory	(38,583)
Accounts payable	(126,638)
Net cash used in operating activities	$ (424,836)

See accompanying notes to financial statements

ABAG Publicly Owned Energy Resources
Financial Statements for the year ended June 30, 2018
Notes to Financial Statements

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Reporting Entity and Operations

ABAG Publicly Owned Energy Resources (POWER) was created pursuant to Chapter 5, Division 7, and Title 1 of the Government Code section 6500 of the State of California in 1997, to acquire energy services for use by its Members.

POWER is a joint powers agency of ABAG and local government entities in Northern California. POWER is governed by a Board of Directors composed of representatives from member jurisdictions. The Board appoints an Executive Committee to carry out policy decisions.

POWER is an "Energy Service Provider (ESP)," aggregating the natural gas requirements of its members as allowed by the California Public Utilities Commission and purchasing gas directly from natural gas producers that offer competitive prices and reliable supply. POWER purchases natural gas on behalf of its members and arranges for delivery to the PG&E system for distribution. The goal of POWER's Natural Gas Program is to provide both cost savings and price stability.

Association of Bay Area Governments (ABAG) was created in 1961 and serves as the Council of Government for the 101 member cities/ towns and nine counties that make up the region with powers and responsibilities granted to it under the laws of the State of California.

The members of POWER must be voting members or cooperating members of ABAG at the time they join POWER. However, not all ABAG members are members of POWER and for that reason, POWER is not a component unit of ABAG. POWER is a public entity and is legally separate from ABAG. ABAG is not responsible for any liabilities or obligations of POWER.

POWER’s Operation

The area served by POWER is encompassed by Pacific Gas & Electric Company (PG&E) which delivers gas to POWER's members. POWER has contracted with a number of vendors for natural gas purchases. As required by the utility companies, the amount of gas POWER purchases each month must be nominated to PG&E's distribution system in advance, and POWER is obligated to purchase the amount nominated, regardless of actual usage. The difference between the amount of gas nominated and the amount actually used results in an "imbalance," which may be cured by making purchases or sales on the open market or allocation to a future month's use.

In July 2017 ABAG staff was consolidated into the Metropolitan Transportation Commission (MTC) and the POWER Board subsequently took action to appoint MTC staff to the relevant POWER officer positions in accordance with the Bylaws. MTC staff will continue to provide administrative support to POWER in accordance with the ABAG-MTC Contract for Services. POWER paid MTC $307,555 for these services in the fiscal year ended June 30, 2018. On the *Statement of Revenues, Expenses, and Changes in Net Position*, this amount is reflected as salaries and benefits and overhead costs.

ABAG Publicly Owned Energy Resources
Financial Statements for the year ended June 30, 2018
Notes to Financial Statements

B. Basis of Presentation

POWER's basic financial statements are prepared in conformity with accounting principles generally accepted in the United States of America. The Governmental Accounting Standards Board (GASB) is the acknowledged standard setting body for establishing accounting and financial reporting standards followed by governmental entities in the United States of America.

C. Measurement Focus, Basis of Accounting and Financial Statements Presentation

The accounting and financial reporting treatment is determined by the applicable measurement focus and basis of accounting. Measurement focus indicates the type of resources being measured such as *current financial resources* or *economic resources*. The basis of accounting indicates the timing of transactions or events for recognition in the financial statements.

POWER's financial statements are prepared using the *economic resources measurement* focus and *the accrual basis of accounting.* POWER accounts for all transactions in a single enterprise fund, which is a separate set of self-balancing accounts that is comprised of assets, deferred outflows of resources, liabilities, deferred inflows of resources, net position, revenues and expenses. All transactions are accounted for on the accrual basis, which means that expenses are recorded when the liability is incurred and revenues are recorded when earned, rather than when cash changes hands.

Revenues from sales of natural gas are recognized in the period in which the gas is billed to members. Members are billed monthly on a levelized basis based on anticipated average usage.

Any excess of billings to members over total actual cost of a fiscal year is reflected as unearned revenue and will be reflected as true-up adjustments in billings in the fiscal year 2019.

New Accounting Pronouncement

GASB Statement No. 75, Accounting *and Financial Reporting for Postemployment Benefits Other Than Pensions*, replaces the requirements of Statements No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple Employer Plans*, for other post-employment benefits (OPEB). This standard establishes new accounting and financial reporting requirements for governmental entities whose employees are provided with OPEB, as well as for certain nonemployer governments that have a legal obligation to provide financial support for OPEB provided to the employees of other entities. This standard was issued in June 2015 and is effective for reporting periods beginning after June 15, 2017. This standard did not have any impact on POWER's financial statements.

ABAG Publicly Owned Energy Resources
Financial Statements for the year ended June 30, 2018
Notes to Financial Statements

GASB Statement No. 81, *Irrevocable Split-Interest Agreements,* requires that a government that receives resources pursuant to an irrevocable split-interest agreement recognize assets, liabilities, and deferred inflows of resources at the inception of the agreement. The requirements of this statement are effective for reporting periods beginning after December 15, 2016. This standard did not have any impact on POWER's financial statements.

GASB Statement No. 83, *Certain Asset Retirement Obligations*, addresses requirements regarding the retirement of certain tangible assets for all state and local governments. The requirements of this statement are effective for reporting periods beginning after June 15, 2018. Management is currently evaluating the effect of this standard on POWER's financial statements.

GASB Statement No. 84, *Fiduciary Activities*, establishes criteria for identifying fiduciary activities of all state and local governments. The requirements of this statement are effective for reporting periods beginning after December 15, 2018. Management is currently evaluating the effect of this standard on POWER's financial statements.

GASB Statement No. 85, *Omnibus 2017*, addresses various practice issues including related blending component units, goodwill, fair value measurement and application, and postemployment benefits (OPEB). The requirements of this statement are effective for reporting periods beginning after June 15, 2017. This standard did not have any impact on POWER's financial statements.

GASB Statement No. 86, *Certain Debt Extinguishment Issues*, provides guidance to improve consistency in accounting and financial reporting for in-substance defeasance of debt. The requirements of this statement are effective for reporting periods beginning after June 15, 2017. This standard did not have any impact on POWER's financial statements.

GASB Statement No. 87, *Leases*, better meets the information needs of financial statement users by improving accounting and financial reporting, enhancing the comparability of financial statements between governments, and also enhancing the relevance, reliability, and consistency of information about the leasing activities. The requirements of this statement are effective for reporting periods beginning after December 15, 2019. Management is currently evaluating the effect of this standard on POWER's financial statements.

GASB Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*, provides additional essential information related to the debt disclosure in notes to financial statements. This statement clarifies which liabilities governments should include when disclosing information related to debt. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018. Management is currently evaluating the effect of this standard on POWER's financial statements.

ABAG Publicly Owned Energy Resources
Financial Statements for the year ended June 30, 2018
Notes to Financial Statements

GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*, establishes accounting requirements for interest cost incurred before the end of a construction period. This statement enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. Management is currently evaluating the effect of this standard on POWER's financial statements.

D. Cash and Investments

POWER has assigned its management of cash and investments to MTC under the contract for services and adopted MTC's investment policy. Accordingly MTC, on behalf of POWER invests its available cash under the prudent investor rule. The prudent investor rule states, in essence, that "in investing … property for the benefit of another, a trustee shall exercise the judgment and care, under the circumstance then prevailing, which people of prudence, discretion, and intelligence exercise in the management of their own affairs." This policy affords POWER a broad spectrum of investment opportunities as long as the investment is deemed prudent and is authorized under the California Government Code Sections 53600, et seq.

Investments allowed under MTC's investment policy adopted by POWER include the following:

- Securities of the U.S. Government or its agencies
- Securities of the State of California or its agencies
- Certificates of deposit issued by a nationally or state chartered bank
- Authorized pooled investment programs
- Commercial paper – Rated "A1" or "P1"
- Corporate notes – Rated "A" or better
- Municipal bonds
- Mutual funds – Rated "AAA"
- Other investment types authorized by state law and not prohibited in MTC's investment policy.

POWER applies the provisions of GASB Statement No. 31, *Accounting and Financial Reporting for Certain Investments and External Investment Pools*, as amended (including by GASB Statement No. 72, *Fair Value Measurement and Application*), which generally requires investments to be recorded at fair value with the difference between cost and fair value recorded as an unrealized gain or loss. Investments are stated at fair value based upon quoted market prices. POWER reports its money market securities and cash equivalents at amortized cost. This is permissible under this standard provided those investments have a remaining maturity at the time of purchase of one year or less and that the fair value of those investments is not significantly affected by the credit standing of the issuer or other factors. Net increases or decreases in the fair value of investments are shown in the Statement of Revenues, Expenses and Changes in Net Position.

ABAG Publicly Owned Energy Resources
Financial Statements for the year ended June 30, 2018
Notes to Financial Statements

POWER considers all balances in demand deposit accounts to be cash, and classifies all other highly liquid cash equivalents as short-term investments. Highly liquid cash equivalents are short-term investment that meet the following definitions:

- Readily convertible to known amounts of cash.
- So near their maturity that they present insignificant risk of changes in value because of changes in interest rates.

E. Natural Gas Inventory

Any excess of natural gas purchase is transferred to the natural gas inventory and it is accounted on the average cost basis.

F. Unearned Revenue

The unearned revenue in POWER consists of the excess of revenues over expenses. POWER will match billings to members with the cost of gas provided and in effect, return any unearned revenue to members as true-up adjustments in billings during the subsequent fiscal year.

G. Due to Other Government

The due to other government consists of the amount due to MTC for services provided in fiscal year 2018.

H. Operating and Nonoperating Revenues and Expense

Operating revenues are those necessary for principal operations of the entity. Operating expenses are those related to user service activities. Nonoperating revenues and expenses are all other revenues and expenses not related to user service activities.

I. Use of Estimates

POWER's management has made a number of estimates and assumptions relating to the reporting of assets and liabilities and revenues and expenses and the disclosure to prepare these financial statements in conformity with generally accepted accounting principles in the United States of America. Actual results could differ from those estimates.

2. NET POSITION

Net position represents residual interest in assets after liabilities are deducted. Net position consists of three sections: Net investment in capital assets, as well as restricted and unrestricted net position, if applicable. The net position remained at zero at June 30, 2018. POWER's financial reporting model reflects all surpluses and deficits as liabilities to or receivables from members.

ABAG Publicly Owned Energy Resources
Financial Statements for the year ended June 30, 2018
Notes to Financial Statements

3. CASH AND INVESTMENTS

A. A summary of Cash and Investments as shown on the Statement of Net Position at June 30, 2018 is as follows:

Cash at banks	$ 296,070
Investments	2,155,194
Total Cash and Investment	$ 2,451,264

B. The composition of cash and investments at June 30, 2018 is as follows:

Cash

Cash at banks	$ 296,070
Total Cash	$ 296,070

Investments

GASB Statement No. 72 sets forth the framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1), and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described as follows:

Level 1: Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets.

Level 2: Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in active markets;
- Inputs other than quoted prices that are observable for the asset or liability;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset has a specified (contractual) term the level 2 input must be observable for substantially the full term of the asset or liability.

ABAG Publicly Owned Energy Resources
Financial Statements for the year ended June 30, 2018
Notes to Financial Statements

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The following is a description of the valuation methodologies used for assets measured at fair value at June 30, 2018:

Local Agency Investment Fund: The position in the California State Local Agency Investment Fund is determined by the fair value of the pool's underlying portfolio.

The following tables set forth by level, within the fair value hierarchy, POWER's investments at fair value.

Investments by fair value level at June 30, 2018	Level 1	Level 2	Level 3	Total
Government Pool Investments:				
Local Agency Investment Fund*	$ -	$ 2,155,194	$ -	$2,155,194
Total Investments Measured at Fair Value	$ -	$ 2,155,194	$ -	$2,155,194

*LAIF is a program created by state statute as an investment alternative for California's local governments and special districts. LAIF funds are available for immediate withdrawal.

C. Deposit and Investment Risk Factors

There are many factors that can affect the value of deposits and investments such as credit risk, custodial credit risk, concentration of credit risk, and interest rate risk.

i.) Credit Risk

Generally, credit risk is the risk that an issuer of an investment fails to fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. LAIF is unrated.

ii.) Custodial Credit Risk

Custodial credit risk is the risk that securities held by the custodian and in the custodian's name may be lost and not be recovered.

ABAG Publicly Owned Energy Resources
Financial Statements for the year ended June 30, 2018
Notes to Financial Statements

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, POWER may not be able to recover its deposits that are in the possession of an outside party. All checking accounts are insured by the Federal Depository Insurance Corporation (FDIC) up to the limit of $250,000.

Under California Government Code Section 53651, depending on specific types of eligible securities, a bank must deposit eligible securities to be posted as collateral with its agent with the securities having a fair value of 110% to 150% of POWER's cash on deposit.

iii.) Concentration of Credit Risk

Concentration of credit risk is the risk associated with lack of diversification, such as having substantial investments in a few individual issuers, thereby exposing the organization to greater risks resulting from adverse economic, political, regulatory or credit developments. LAIF is the only investment made by POWER and LAIF consists of pooled investment securities.

iv.) Interest Rate Risk

Interest rate risk is the potential adverse effect resulting from changes in market interest rates on the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. The weighted average maturity of the investments in the LAIF investment pool at June 30, 2018 is 0.53 years.

4. PURCHASE COMMITMENTS

During the fiscal year, POWER entered into agreements with two energy companies to facilitate the sale and purchase of natural gas for a particular delivery period. The first agreement constituted a purchase commitment of $316,315. The second agreement was a flexible contract whereas POWER has the flexibility to purchase a quantity from zero to 2,000 MMBtu/daily. Therefore, there is no financial commitment for this agreement.

5. SUBSEQUENT EVENTS

POWER has evaluated subsequent events for the period from June 30, 2018 through October 12, 2018, the date the financial statements were available to be issued, and no subsequent events have been identified.

ASSOCIATION OF BAY AREA GOVERNMENTS
Representing City and County Governments of the San Francisco Bay Area

DATE: October 25, 2018

TO: ABAG POWER Executive Committee

FROM: Brad Paul, Deputy Executive Director

RE: **ABAG Publicly Owned Energy Resources (POWER) Audit Financial Highlights for Fiscal Year (FY) 2017-18**

RECOMMENDATION:

Receive a presentation from Filip Nowak, Senior Manager with PricewaterhouseCoopers, LLP and staff on ABAG Publicly Owned Energy Resources (POWER) audited financial statements for FY 2017-18 and accept the financial statements and accompanying reports.

BACKGROUND/DISCUSSION:

Pursuant to ABAG POWER's by-laws and State law, an independent audit firm performs an annual financial audit and an opinion is issued on POWER's financial position as of June 30 of each year. The Financial Statements are for the period ended June 30, 2018. POWER received an unmodified (clean) opinion.

The ABAG POWER Financial Statements (separately enclosed) is comprised of several sections:

- **Report of Independent Auditors** – this section has the independent auditors' report which includes the auditors' opinion on the presentation of the accompanying financial statements from PricewaterhouseCoopers, LLP.
- **Management Discussion and Analysis** – this section includes Management's Discussion and Analysis (MD&A), which is managements' overview of POWER's financial position; identification of any major issues and projections for the future.
- **Basic Financial Statements** – this section includes actual financial statements and note disclosures.

FINANCIAL IMPACT:

Management's Discussion and Analysis section of the Financial Statements discloses management's perspective on the financial position of POWER for FY 2017-18.
Financial highlights include:

- 38 cities, counties, and special districts are participants in POWER.
- Total gas usage for FY 2017-18 decreased by approximately 13,000 therms in comparison to the prior year.
- In FY 2017-18 gas true-up adjustments resulted in $673,737 refund that will be returned to participating members (see page 7 unearned revenue).

- In FY 2018-19 the following new initiatives will be commenced:
  - Fulfilling requirements to allow POWER to begin purchasing gas internationally (Canada) for cost-savings reasons.
  - Considering adding an "opt-in" program for renewable natural gas and/or natural gas offset products.

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ATTACHMENT:

1. ABAG POWER Financial Statements for FY 2017-18 and accompanying reports are **separately enclosed.**

APPROVED BY:

Brad Paul

Brad Paul

ASSOCIATION OF BAY AREA GOVERNMENTS
Representing City and County Governments of the San Francisco Bay Area

ABAG POWER Proposed Executive Committee
Fiscal Year 2018-19

Individual	Title	Member Agency
Angela Walton	ECIP/DIMO Administrative Manager	City of Richmond
Chris Schroeder	Purchasing Officer	City of Milpitas
Dan Schoenholz	Deputy Community Development Director	City of Fremont
Dave Brees	Special Projects Manager	City of Los Altos
Misty Mersich	Sustainability Manager	City of Cupertino

The ABAG POWER Executive Committee is a standing committee comprised of the Chair, Vice Chair, and three to nine members. The Executive Committee oversees all aspects of the administration and operation of the ABAG POWER Joint Powers Authority (JPA), including energy programs that directly affect the member agencies. Currently, this primarily consists of the natural gas aggregation program and efforts to adapt the program to California's ambitious environmental goals within an ever-changing regulatory landscape. The Executive Committee approves the budget and sets the strategic direction for all program activities.

Executive Committee members can also expect to be involved in discussions regarding Community Choice Aggregation, regional energy efficiency efforts, solar photovoltaic adoption, and opportunities to add value to the program to ensure its viability as an alternative to Pacific Gas & Electric.

ABAG POWER values and encourages active participation from member agencies. For this reason, we invite you to send us an email at rjacoby@bayareametro.gov if you are interested in learning more about the program or opportunities to join the Executive Committee.