# ASSOCIATION OF BAY AREA GOVERNMENTS Meeting Transcript



1	ABAG POWER BOARD OF DIRECTORS
2	THURSDAY, OCTOBER 29, 2020, 11:00 AM
3	
4	DAVE BREES, CHAIR: GOOD MORNING AND WELCOME EVERYBODY TO THE
5	2020 ABAG BOARD OF DIRECTORS'S MEETING. ON BEHALF OF YOUR
6	EXECUTIVE COMMITTEE, WE ARE GRATEFUL YOU GUYS ARE WITH US AND
7	ARE GETTING READY TO HEAR ALL THE GOOD WORK THAT OUR STAFF HAS
8	BEEN DOING ON OUR BEHALF. THIS PAST YEAR HAS BEEN FAR FROM
9	NORMAL FOR ALL OF US, AND IT'S BEEN MORE LIKE A WILD RODEO
10	RIDE THAN IT HAS BEEN A NORMAL JAUNT IT HASN'T BEEN A WALK
11	IN THE PARK, WHETHER IT'S COVID, UNPREDICTABILITY OF
12	VOLATILITY AND CHANGES IN THE NATURAL GAS MARKET PROGRAM
13	RELATED TO SUSTAINABILITY, CARB NATION REGIONAL CODES ALL OF
14	THESE COMBINED FOR SIGNIFICANT CHALLENGES TO OUR PROGRAM. THE
15	MTC STAFF WILL BE UPDATING THE BOARD ON THESE DIFFERENT ITEMS
16	IN A LITTLE BIT. BUT I WANTED TO EXTEND A WARM WELCOME, IF
17	THERE IS ANY OF YOU WHO ARE JOINING US FOR THE FIRST TIME AND
18	ALSO A SPECIAL THANK YOU TO OUR PROGRAM STAFF AND THE
19	EXECUTIVE COMMITTEE MEMBERS WHO ARE ALL WITH US TODAY. JENNY
20	AND RYAN, AND THEIR CREW HAVE CONTINUED TO LEAD US THROUGH OUR
21	CHALLENGES AND HAVE A VERY FIRM GRIP ON OUR PROGRAM AND WHERE
22	WE'RE AT. WITHOUT FURTHER ADO, I WILL INVITE IT STAFF TO ROLL
23	OUR VIDEO INTRODUCTION. DUE TO COVID-19, THIS MEETING WILL BE
24	CONDUCTED AS A ZOOM WEBINAR. PURSUANT TO THE PROVISIONS OF THE
25	GOVERNOR'S EXECUTIVE ORDER N-29-20, WHICH SUSPENDS CERTAIN



- 1 REQUIREMENTS OF THE BROWN ACT. THIS MEETING WILL BE WEBCAST ON
- 2 THE ABAG WEB SITE. I WILL CALL UPON COMMISSIONERS, PRESENTERS,
- 3 STAFF, AND OTHER SPEAKERS BY NAME AND ASK THAT THEY SPEAK
- 4 CLEARLY AND RESTATE THEIR NAMES BEFORE GIVING COMMENTS OR
- 5 REMARKS. PERSONS PARTICIPATING VIA ZOOM AND WEBCAST WITH THEIR
- 6 CAMERAS ENABLED ARE REMINDED THEIR ACTIVITIES ARE VISIBLE TO
- 7 VIEWERS. COMMISSIONERS AND MEMBERS OF THE PUBLIC PARTICIPATING
- 8 BY ZOOM, WISHING TO SPEAK SHOULD USE THE RAISED HAND FEATURE
- 9 OR DIAL STAR NINE AND I WILL CALL UPON YOU AT THE APPROPRIATE
- 10 TIME. TELECONFERENCE ATTENDEES WILL BE CALLED UPON BY THE LAST
- 11 FOUR DIGITS OF THEIR PHONE NUMBERS. AND IT IS REQUESTED THAT
- 12 PUBLIC SPEAKERS RESTATE THEIR NAMES AND ORGANIZATIONS, BUT
- 13 PROVIDING SUCH INFORMATION IS VOLUNTARY. MEMBERS OF THE PUBLIC
- 14 WISHING TO ADDRESS THIS BODY WERE ASKED TO SUBMIT COMMENTS IN
- 15 WRITING AT INFO@BAYAREAMETRO.GOV. WRITTEN COMMENTS RECEIVED
- 16 WILL BE POSTED TO THE ONLINE AGENDA AND ENTERED INTO THE
- 17 RECORD BUT WILL NOT BE READ OUT LOUD. IF AUTHORS OF THE
- 18 WRITTEN CORRESPONDENCE WOULD LIKE TO SPEAK, THEY ARE FREE TO
- 19 DO ON THE REFERENCED AGENDA ITEM OR ANY TOPIC THEY CHOOSE.
- 20 SPEAKERS SHOULD RAISE THEIR HAND, AND I WILL CALL UPON THEM AT
- 21 THE APPROPRIATE TIME. A ROLL CALL VOTE WILL BE TAKEN FOR ALL
- 22 ACTION ITEMS. THE CHAT FEATURE IS ACTIVE, HOWEVER, PLEASE BE
- 23 AWARE THAT ANYTHING TYPED INTO THE CHAT WILL BE SUBJECT TO
- 24 PUBLIC DISCLOSURE. THE CHAT FEATURE IS NOT AVAILABLE TO



ATTENDEES. IN ORDER TO GET THE FULL ZOOM EXPERIENCE, PLEASE 1 2 MAKE SURE YOUR APPLICATION IS UP TO DATE. 3 DAVE BREES, CHAIR: GREAT. THANK YOU. AND NOW WE WOULD LIKE TO 4 5 INVITE OUR CLERK TO CONDUCT A ROLL CALL AND CONFIRM WHETHER OR 6 NOT WE HAVE A CORE UM. 7 8 CINDY CHEN, CLERK: YES CHAIRMAN, GOOD MORNING EVERYBODY. I'LL 9 CALL EVERYONE IN ALPHABETICAL ORDER FOR EACH REPRESENTATIVE. PLEASE UNMUTE YOURSELF TO RESPOND. LIAM GARLAND WITH CITY OF 10 ALAMEDA IS ABSENT. MARK HURLEY? 11 12 13 SPEAKER: PRESENT. 14 CINDY CHEN, CLERK: JOHN WITH TOWN OF ATHERTON IS ABSENT. ALAN 15 16 SHEAR? 17 18 SPEAKER: PRESENT. 19 CINDY CHEN, CLERK: STEVE LEDERER WITH CITY OF CUPERTINO? 20 21 22 SPEAKER: HERE. 23 CINDY CHEN, CLERK: CITY OF FREMONT? IS ABSENT. 24



SPEAKER: DAN SCHOENHOLZ AS AN ALTERNATE. MIKE SUNG IS NO 1 LONGER WITH THE CITY SO I AM HERE ON HIS BEHALF. 2 3 CINDY CHEN, CLERK: MAY I HAVE YOUR NAME, PLEASE? 4 5 SPEAKER: DAN SCHOENHOLZ. 6 7 8 CINDY CHEN, CLERK: JENNIFER MENNUCCI WITH GOLDEN GATE BRIDGE 9 HIGHWAY AND TRANSPORTATION DISTRICT. 10 SPEAKER: PRESENT. 11 12 CINDY CHEN, CLERK: PAT DOBBINS WITH CITY OF GONZALEZ IS 13 14 ABSENT. 15 16 CINDY CHEN, CLERK: MATTHEW CHIDESTER WITH CITY OF HALF MOON BAY. 17 18 19 SPEAKER: PRESENT. 20 CINDY CHEN, CLERK: DAVE BIGGS WITH CITY OF HERCULES IS ABSENT. 21 22 23 CINDY CHEN, CLERK: CANDAS LATIGUE WITH CITY OF ALAMEDA? 24 SPEAKER: PRESENT. 25



1	
2	CINDY CHEN, CLERK: DAVE BREES WITH CITY OF LOS ALTOS.
3	
4	SPEAKER: PRESENT.
5	
6	CINDY CHEN, CLERK: ERIC IS ABSENT.
7	
8	CINDY CHEN, CLERK: KIREN WITH CITY OF MILLBRAE IS ABSENT.
9	
10	CINDY CHEN, CLERK: CHRIS SCHROEDER WITH CITY OF MILPITAS?
11	
12	CHRIS SCHROEDER: PRESENT.
13	
14	CINDY CHEN, CLERK: STEVE LEDERER WITH COUNTY OF NAPA?
15	
16	SPEAKER: PRESENT.
17	
18	CINDY CHEN, CLERK: DANIEL HAMILTON WITH CITY OF OAKLAND IS
19	ABSENT.
20	
21	CINDY CHEN, CLERK: STEVE WITH CITY OF MARINDA IS ABSENT.
22	
23	CINDY CHEN, CLERK: TINA WEHMEISTER WITH CITY OF PACIFICA?
24	
25	TINA WEHMEISTER: PRESENT.



1	
2	CINDY CHEN, CLERK: COREY IS ABSENT.
3	
4	CINDY CHEN, CLERK: KATHLEEN YUHCHAK WITH CITY OF PLEASANTON?
5	
6	KATHLEEN YURCHAK: PRESENT.
7	
8	CINDY CHEN, CLERK: SEAN BROOKS WITH REALITY ADMINISTRATIVE
9	CORPORATION IS ABSENT. ANGELA WALTON WITH CITY OF RICHARD?
10	
11	ANGELA WALTON: HERE.
12	
13	CINDY CHEN, CLERK: BRYAN WITH CITY OF SALINAS.
14	
15	BRYAN FRUS: PRESENT.
16	
17	CINDY CHEN, CLERK: CITY OF SAN CARLOS IS ABSENT. GARY WITH
18	CITY OF SAN MATEO IS ABSENT. BILL GUERIN WITH CITY OF SAN
19	MATEO.
20	
21	SPEAKER: HUNTER YOUNG IS PRESENT. WHO DID YOU SAY?
22	
23	CINDY CHEN, CLERK: I SAID BILL GUERIN?
24	
25	SPEAKER: I AM IN HIS PLACE.



1	
2	CINDY CHEN, CLERK: THANK YOU. LIN ORTEGA CITY OF SANTA CLARA?
3	
4	LIN ORTEGA: HERE.
5	
6	CINDY CHEN, CLERK: DOUG WILLIAMS, CITY OF SANTA ROSA.
7	
8	SPEAKER: HERE.
9	
10	CINDY CHEN, CLERK: THOMAS SCOTT?
11	
12	THOMAS SCOTT: PRESENT.
13	
14	CINDY CHEN, CLERK: CITY OF UNION CITY IS ABSENT. MORTON WITH
15	VALLEJO WASTEWATER DISTRICT?
16	
17	SPEAKER: I AM HERE.
18	
19	CINDY CHEN, CLERK: ROLAND ROJAS WITH CITY OF VALLEJO IS
20	ABSENT. GABRIEL GORDO CITY OF WATSONVILLE?
21	
22	GABRIEL GORDO: PRESENT.
23	



1	CINDY CHEN, CLERK: [INDISCERNIBLE] WITH CITY OF WINTERS IS
2	ABSENT. IS THERE ANYBODY WHO JUST JOINED OR I MISSED? IF NOT,
3	I CONCLUDED THE ROLL CALL. QUORUM IS PRESENT. THANK YOU.
4	
5	DAVE BREES, CHAIR: GREAT. THANK YOU VERY MUCH. NOW I INVITE
6	YOU TO CONDUCT ROLL CALL OF THE STAFF THAT ARE PRESENT WITH US
7	TODAY.
8	
9	CINDY CHEN, CLERK: YES, CHAIRMAN. STAFF MEMBERS PLEASE BE
10	READY TO UNMUTE YOURSELVES TO RESPOND. BRAD PAUL?
11	
12	BRAD PAUL: PRESENT.
13	
14	CINDY CHEN, CLERK: ARLEICKA CONNOLY?
15	
16	ARLEICKA CONLEY: PRESENT.
17	
18	CINDY CHEN, CLERK: MATTHEW LAVRINETS?
19	
20	MATTHEW LAVRINETS: PRESENT.
21	
22	CINDY CHEN, CLERK: JENNIFER BURKE?
23	
24	SPEAKER: PRESENT.
25	



CINDY CHEN, CLERK: RYAN JACOBY? 1 2 3 RYAN JACOBY: PRESENT. 4 CINDY CHEN, CLERK: IS THERE ANY STAFF MEMBER THEY MISSED? THAT 5 6 CONCLUDES STAFF ROLL CALL. 7 8 DAVE BREES, CHAIR: THANK YOU. THAT TAKES US TO OUR PUBLIC 9 COMMENT SECTION. CLERK, DO WE HAVE ANY MEMBERS OF THE PUBLIC 10 THAT ARE ONLINE, OR SUBMITTED COMMENTS? 11 CINDY CHEN, CLERK: NO. WE DO NOT HAVE ANY COMMENTS RIGHT NOW. 12 13 DAVE BREES, CHAIR: OKAY. SEEING NONE, WE'LL GO ON TO THE 14 CONSENT CALENDAR. BEFORE US WE HAVE THE APPROVAL OF THE 15 16 SUMMARY MINUTES OF THE ABAG POWER MEETING HELD LAST YEAR ON OCTOBER 30TH, 2019. THIS IS AN ACTION ITEM. SO, I'LL REITERATE 17 18 THE PROCESS FOR VOTING. IT'S THE TELEPHONIC PROCESS, AND THE CLERK WILL CONDUCT A ROLL CALL TO VOTE, AND IT WILL BE FOR AN 19 AYE, NAY, OR ABSTENTION ON EACH ITEM. IS THERE A MOTION TO 20 21 APPROVE THE SUMMARY MINUTES? 22 23 CHRIS SCHROEDER: I SO MOVE. 24 DAVE BREES, CHAIR: IS THERE A SECOND? 25



1 2 SPEAKER: SECOND. 3 CINDY CHEN, CLERK: THE MOTION BY? I DIDN'T HEAR WHO'S VOICE 4 5 WAS THAT? 6 7 CHRIS SCHROEDER: CHRIS SCHROEDER. 8 9 CINDY CHEN, CLERK: CHRIS SCHROEDER. THANK YOU. 10 DAVE BREES, CHAIR: AND THE SECOND? 11 12 ANGELA WALTON: ANGELA WALTON. 13 14 15 CINDY CHEN, CLERK: GREAT. THANK YOU. 16 DAVE BREES, CHAIR: UNLIKE OUR OTHER BOARD MEETINGS, WE HAVE 17 18 SEVERAL PEOPLE WITH US, AND THERE IS SEVERAL DIFFERENT VOTES 19 ON THE SCREENS, SO IT'S A LITTLE BIT TRICKY TO SEE WHO IS TALKING AND WHEN. SO IF YOU SPEAK UP, PLEASE INTRODUCE 20 21 YOURSELF, SO WE KNOW WHO IS SPEAKING. OKAY. GOING BACK TO THE 22 MOTION, IS THERE ANY DISCUSSION ANYONE WOULD LIKE TO HAVE ON 23 THE MOTION BEFORE US? SEEING NONE. THE CLERK INFORM IF THERE IS ANY PUBLIC COMMENT ON THIS ITEM? 24



- 1 CINDY CHEN, CLERK: YES. I DO NOT SEE ANY PUBLIC COMMENTS NOR
- 2 ANY RAISED HANDS WITH THIS ITEM.

3

- 4 DAVE BREES, CHAIR: OKAY. GREAT. SO I WOULD NOW CALL FOR A VOTE
- 5 OF THE BOARD.

6

- 7 CINDY CHEN, CLERK: YES. PLEASE BE PATIENT WITH ME. I'LL FOLLOW
- 8 THE SAME ROLL CALL ORDER. PLEASE UNMUTE YOURSELF TO STATE YOUR
- 9 VOTE FOR THIS ITEM.

10

- 11 CINDY CHEN, CLERK: [ROLL CALL VOTE] ALL RIGHT. THANK YOU ALL.
- 12 THE MOTION PASSES.

13

- 14 DAVE BREES, CHAIR: GREAT. THANK YOU VERY MUCH FOR DOING THAT.
- 15 THAT TAKES US TO OUR NEXT AGENDA ITEM WHICH IS THE ABAG POWER
- 16 AUDITED FINANCIAL STATEMENTS AND REPORTS FOR THE FISCAL YEAR
- 17 '19/'20. THIS TOO IS AN ACTION ITEM AND HERE TO PRESENT IT IS
- 18 ARLEICKA CONLEY AND ARLEICKA WILL INTRODUCE KATHY L, AND THE
- 19 TWO WILL JOINTLY GIVE THE REPORT.

- 21 ARLEICKA CONLEY: GOOD MORNING MEMBERS OF THE BOARD. ARLEICKA
- 22 CONLEY DIRECTOR FOR FINANCE AND ACCOUNTING FOR ABAG/MTC. I
- 23 WILL INTRODUCE KATHY LAI WHO IS THE LEAD ENGAGEMENT PARTNER
- 24 FOR LLC CROWE AND HER TEAM. PART OF HER, WE ENGAGE WITH CWC,
- 25 SO CROWE IS A NEW AUDIT TEAM ON THIS ENGAGEMENT IS THEY HAVE



- 1 DONE A TREMENDOUS JOB PRETTY MUCH WORKING 100 PERCENT REMOTELY
- 2 ON ENGAGEMENT WITH STAFF. IT'S A TESTAMENT ALSO TO STAFF,
- 3 JENNY, BRAD PAUL, CFO BRIAN MAYHEW, GENERAL LEDGER FINANCIAL
- 4 REPORTING TEAM ALL COLLEAGUES FROM MTC IN BEING NOT ONLY ABLE
- 5 TO PERFORM THE AUDIT WITH NEW AUDITORS BUT ALSO GETTING IT
- 6 DONE ON TIME. SO I WANT TO SEND A BIG THANK YOU. AND I WANT TO
- 7 COMMEND STAFF FOR ALL OF THEIR EFFORTS. KATHY LAI WILL PROVIDE
- 8 AUDIT RESULTS AND COMMUNICATIONS TO THIS BOARD AND UPON
- 9 CONCLUSION OF HER PRESENTATION, I'LL PROVIDE AN OVERVIEW OF
- 10 THE FISCAL YEAR 2019, 2020 ABAG POWER FINANCIAL STATEMENT.
- 11 SUBSEQUENT TO MY PRESENTATION, I'LL ASK IF THEIR IS ANY
- 12 QUESTIONS, AND AGAIN, THIS IS AN ACTION ITEM. SO WITH THAT
- 13 I'LL TURN IT OVER TO KATHY.
- 15 SPEAKER: THANK YOU ARLEICKA. IT WAS TRULY OUITE A YEAR TO DO
- 16 THIS IN THE MIDST OF A PANDEMIC I APPRECIATE ALL OF THE
- 17 EFFORTS OF MANAGEMENT AS WELL AS THE CROWE ENGAGEMENT TEAM.
- 18 ARLEICKA IS MY PRESENTATION GOING TO BE PULLED UP? TERRIFIC.
- 19 ALL RIGHT. IF YOU COULD ADVANCE TO THE NEXT SLIDE PLEASE. I AM
- 20 PLEASED TO PRESENTED OUR AUDIT RESULTS. WE HAVE GOT SOME
- 21 REQUIRED COMMUNICATIONS UNDER OUR PROFESSIONAL AUDITING
- 22 STANDARDS. AS OF TODAY OUR AUDIT IS SUBSTANTIALLY COMPLETED WE
- 23 HAVE A FEW PENDING ITEMS TYPICAL OF THIS STAGE IN THE
- 24 ENGAGEMENT AND UPON APPROVAL TODAY I WILL WORK WITH MANAGEMENT
- 25 TO GET THOSE ISSUES RIGHT AWAY. WE HAVE GOT A BRIEF AGENDA



- 1 HERE ON THE NEXT SLIDE I'M GOING TO COVER THREE ITEMS FIRST I
- 2 THOUGHT IT WOULD BE WORTHWHILE TO REVISIT WHAT THE AUDIT
- 3 OBJECTIVE IS SO EVERYONE IS CLEAR AS WHAT WE HAVE BEEN ENGAGED
- 4 TO DO AND WHAT WE HAVE PERFORMED. SECOND I'LL GO OVER THE
- 5 AUDIT RESULTS AND THIRD, THE REQUIRED COMMUNICATIONS AS
- 6 MENTIONED BEFORE. YOU GO COULD ADVANCE TO THE NEXT SLIDE FOR
- 7 THE AUDIT OBJECTIVE. SO, THE OBJECTIVE OF THE FINANCIAL
- 8 STATEMENT AUDIT IS TO EXPRESS AN OPINION ON WHETHER THE
- 9 FINANCIAL STATEMENTS ARE PRESENTED FAIRLY IN ALL MATERIAL
- 10 RESPECTS IN ACCORDANCE WITH GENERALLY ACCEPTED ACCOUNTING
- 11 PRINCIPLES. MANAGEMENT IS ACTUALLY RESPONSIBLE FOR THE
- 12 FINANCIAL STATEMENTS TO ENSURE THEY'RE FAIRLY PRESENTED. FOR
- 13 THE AUDITOR RESPONSIBILITIES WE ARE RESPONSIBLE FOR CONDUCTING
- 14 OUR AUDIT IN ACCORDANCE WITH WHAT'S CALLED GENERALLY ACCEPT
- 15 THE AUDITING STANDARDS. SO THAT COVERS THE AUDIT OBJECTIVE AND
- 16 SCOPE. LET'S MOVE ON TO THE AUDIT RESULTS. IF YOU COULD
- 17 ADVANCE A COUPLE OF SLIDES FORWARD. FOR ABAG POWER, I AM
- 18 PLEASED TO REPORT THAT I ANTICIPATE TO ISSUE AN UNMODIFIED
- 19 OPINION. SO WHAT THAT MEANS IS THAT IS THE HIGHEST LEVEL OF
- 20 ASSURANCE. AGAIN, AS I MENTIONED BEFORE, THE OPINION IN THE
- 21 REPORT WILL STATE THE FINANCIAL STATEMENTS ARE FAIRLY STATED
- 22 IN ALL MATERIAL RESPECT IN ACCORDANCE WITH ACCEPT THE
- 23 ACCOUNTING PRINCIPLES. SO IF THAT STATEMENT IS UNMODIFIED THAT
- 24 IS EXCELLENT NEWS. IN CONSIDERATION OF INTERNAL CONTROLS OVER
- 25 FINANCIAL REPORTING DURING OUR AUDIT I AM PLEASED TO REPORT WE



- 1 DID NOT IDENTIFY ANY MATERIAL WEAKNESSES OR SIGNIFICANT
- 2 DEFICIENCIES IN INTERNAL CONTROLS SO MORE GOOD NEWS. ALL RIGHT
- 3 WE'LL MOVE TO REQUIRED COMMUNICATIONS. ADVANCE SLIDE.
- 4 STANDARDS REQUIRE US TO MAKE COMMUNICATIONS TO THOSE IN CHARGE
- 5 OF GOVERNANCE. FIRST I WANT TO HIGHLY THE SIGNIFICANT
- 6 ACCOUNTING POLICIES. MANAGEMENT HAS PROPERLY DISCLOSED THEIR
- 7 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES IN FOOTNOTE ONE OF
- 8 THE REPORT. WE HAVE REVIEWED THEM AS THE AUDITORS AND THEY
- 9 APPEAR TO BE CLEAR AND CONSISTENT FROM THE PRIOR PERIODS.
- 10 SECOND REQUIRED COMMUNICATION IS THE ADOPTION OF ANY NEW
- 11 ACCOUNTING STANDARDS. AND THERE IS AN ACCOUNTING STANDARD
- 12 SETTING BODY WHICH IS CALLED GASB, THEY ISSUE THESE ACCOUNTING
- 13 STANDARDS FROM YEAR TO YEAR AND MANAGEMENT HAS TO CONSIDER
- 14 THEM IN THEIR FINANCIAL REPORTING IN THIS GIVEN YEAR THEY
- 15 ISSUED A WELCOME STANDARD GASB 95 WHICH OFFERED PRE MANAGEMENT
- 16 FOR POST POSTPONED EFFECTIVE DATES FOR CERTAIN AUTHORITATIVE
- 17 GUIDANCE ALL OF THAT IS TO SAY IS THAT MANAGEMENT ADOPTED THAT
- 18 AND TOOK THE EXTENSION AN OLIVE BRANCH THAT WAS OFFERED BY
- 19 GASB. NEXT SLIDE HERE, NEXT STEP FOR THIRD MATTER IS THE
- 20 MANAGEMENT'S ACCOUNTING ESTIMATES AND JUDGMENTS. MAY INCLUDE
- 21 ESTIMATES THAT ARE SUBJECT TO OUR AUDIT. I WANT TO POINT OUT
- 22 FAIR VALUE OF INVESTMENTS EVALUATION OF INVENTORY. I'LL SAY WE
- 23 REVIEWED INVESTMENTS AND BELIEVE THEM TO BE APPROPRIATE. NEXT
- 24 SLIDE IN RELATION TO AUDIT ADJUSTMENTS. WE DID NOT NOTE ANY
- 25 MATERIAL CORRECTED OR UNCORRECTED MISSTATEMENTS. AND LAST BUT



- 1 NOT LEAST ON THE FOLLOWING SLIDE, WE DID NOT NOTE ANY OF THE
- 2 FOLLOWING MATTERS NOTED HERE ON THIS SLIDE FROM SIGNIFICANT
- 3 ACCOUNTING POLICIES AND CONTROVERSIAL OR EMERGING AREAS ALL
- 4 THE WAY DOWN TO INDEPENDENT MATTERS WE WOULD REPORT TO THE
- 5 BOARD AND MANAGEMENT. WITH THAT, WE CAN ADVANCE TO ANY
- 6 QUESTIONS YOU MIGHT HAVE.

8 ARLEICKA CONLEY: OKAY. SEEING NO QUESTIONS. WOULD YOU LIKE TO

- 9 ADVANCE TO THE NEXT PRESENTATION. THANK YOU KATHY.
- 11 SPEAKER: THANK YOU.

7

10

- 13 ARLEICKA CONLEY: PLEASE BRING UP THE AUDIT FINANCIAL
- 14 PRESENTATION, PLEASE. THANK YOU. I'LL PROVIDE AN OVERVIEW OF
- 15 ABAG FINANCIAL REPORT AND YEAR END AUDIT RESULTS. NEXT SLIDE.
- 16 ABAG POWER PROVIDES NATURAL RESOURCES TO ITS MEMBERS FROM
- 17 SUPPLIERS ONCE THAT NATURAL GAS RESOURCE IS PURCHASED IT'S
- 18 PROVIDED AND DISTRIBUTED TO PACIFIC GAS AND ELECTRIC PIPELINE.
- 19 THIS FISCAL YEAR 1920, THERE WERE NO NEW MEMBERS TO THE ABAG
- 20 POWER. MAKING EFFORTS TO PROVIDE NATURAL GAS AT COST EFFECTIVE
- 21 PRICE AND ALWAYS TAKING INTO ACCOUNT PRICE STABILITY IN THE
- 22 ENVIRONMENT. STAFF IS MONITORING THE COVID CRISIS AND IMPACT
- 23 IT MAY HAVE CURRENTLY AND IN THE FUTURE. NEXT SLIDE. WE'RE
- 24 GOING TO TAKE A DEEP DIVE, MOSTLY AN OVERVIEW OF OUR FINANCIAL
- 25 STATEMENTS. WE'RE GOING TO START WITH A STATEMENT OF POSITION,



- 1 REFERRED TO AS THE BALANCE SHEET IN COMPARISON TO THE PRIOR
- 2 YEAR CASH AND INVESTMENTS INCREASED OVER \$800,000, THIS IS A
- 3 RESULT OF NATURAL GAS COST BEING HIGHER THAN THE PRIOR YEAR.
- 4 AFTER THE CONCLUSION OF FISCAL YEAR WE TRUE-UP COST AND IF
- 5 THERE IS SURPLUS OVER REVENUE THOSE BALANCES ARE PROVIDED BACK
- 6 TO THE MEMBERS. IN FISCAL YEAR 1920 WE HAD EXCESS OF REVENUES
- 7 OF OVER \$900,000. AS OF FISCAL YEAR 1920, THIS FINANCIAL MODEL
- 8 FOR ABAG POWER IF THERE IS SURPLUS THOSE ARE RETURNED TO THE
- 9 MEMBERS. IF YOU LOOK AT THE BOTTOM OF STATEMENT OF POSITION,
- 10 IT WILL ALWAYS BE -- BECAUSE IF YOU HAVE SURPLUS RETURN TO THE
- 11 MEMBERS IF THERE IS DEFICIT THOSE [INDISCERNIBLE] NEXT SLIDE.
- 12 IN COMPARISON TO THE PRIOR YEAR NATURAL GAS RESOURCES
- 13 INCREASED PART OF IT IS DUE TO WEATHER PART OF IT MIGHT BE THE
- 14 IMPACT OF THE COVID ENVIRONMENT. WE'RE NOT SURE AND ARE
- 15 CONTINUING TO MONITOR THOSE IMPACTS. AND THERE IT WAS A --
- 16 SORRY. WRONG SLIDE. WRONG PRESENTATION. I'LL CONTINUE. THERE
- 17 WAS A CORRESPONDING DECREASE IN REVENUE AS A RESULT. AND IN
- 18 ADDITION, SINCE MTC, METROPOLITAN TRANSPORTATION COMMISSION
- 19 PROVIDES STAFFING FOR ABAG POWER, WE HAVE TO [INDISCERNIBLE]
- 20 FOR THOSE RESOURCES. IN FISCAL YEAR 1920 STAFF OVERHEAD AND
- 21 BENEFITS WERE A LITTLE OVER 333,000. AND THAT CONCLUDES MY
- 22 PRESENTATION. I WELCOME ANY QUESTIONS. AND AGAIN THIS IS AN
- 23 ACTION ITEM TO ACCEPT THE FINANCIAL REPORT. ARE THERE ANY
- 24 QUESTIONS? PRIOR TO CONCLUDING MY PRESENTATION, I WOULD LIKE
- 25 TO SAY ONE MORE THING. AS CATH MENTIONED, THERE WERE



- 1 ABSOLUTELY NO FINDINGS, SO THAT IS A TESTAMENT OF PROVIDING
- 2 UNAUDITED, DURING THE YEAR, BRIAN PROVIDES YOU WITH FINANCIAL
- 3 STATEMENTS THERE ARE AUDITS AND NO ADJUSTMENTS AND THAT'S A
- 4 TESTAMENT THAT WE'RE PROVIDING FINANCIAL INFORMATION
- 5 THROUGHOUT THE YEAR AND OUR CONTROLS ARE WORKING AND THEY'RE
- 6 MITIGATING ANY MISAPPROPRIATION OF ASSETS. AGAIN, I WANT TO
- 7 COMMEND STAFF. WITH THAT I'LL TAKE QUESTIONS.

8

- 9 DAVE BREES, CHAIR: GREAT. THANK YOU VERY MUCH ARLEICKA, I WANT
- 10 TO THANK YOU FOR PROVIDING THESE GREAT STANDARDS AND CONTROLS
- 11 TO PROTECT AND KEEP US IN LINE AND ACCOUNTABLE. SO WITH THAT,
- 12 IS THERE A MOTION TO ACCEPT THE AUDITED FINANCIAL STATEMENTS
- 13 AND REPORTS FOR FISCAL YEAR 2019/2020?

14

15 SPEAKER: THIS IS MELISSA MORTON, SO MOVED.

16

17 DOUG WILLIAMS: THIS IS DOUG WILLIAMS. SECOND.

18

- 19 DAVE BREES, CHAIR: THANK YOU DOUG AND MELISSA. IS THERE ANY
- 20 DISCUSSION ON THE ITEM? OKAY. I'M NOT SEEING ANY. I'LL ASK THE
- 21 CLERK, HAS THERE BEEN ANY PUBLIC COMMENTS ON THIS ITEM
- 22 SUBMITTED?

- 24 CINDY CHEN, CLERK: NO. I DO NOT SEE ANY RAISED HANDS OR ANY
- 25 PUBLIC COMMENTS FOR THIS ITEM.



1 DAVE BREES, CHAIR: GREAT. WELL THEN I WILL INVITE TO YOU 2 3 CONDUCT A VOTE OF THE BOARD. 4 5 CINDY CHEN, CLERK: YES. BOARD MEMBERS PLEASE BE READY TO 6 UNMUTE YOURSELF TO STATE YOUR VOTE FOR THIS ITEM. [ROLL CALL 7 VOTE | WITH THAT WE HAVE 21. THANK YOU. THE MOTION PASSES. 8 DAVE BREES, CHAIR: GREAT. THANK YOU VERY MUCH FOR DOING THAT. 9 10 THAT TAKES US TO OUR NEXT AGENDA ITEM, WHICH IS AGENDA ITEM NUMBER FIVE THE APPROVAL OF CALENDAR YEAR 2021 ABAG EXECUTIVE 11 COMMITTEE AND APPOINTMENT OF CHAIR AND VICE CHAIR. IN YOUR 12 PACKET IS THE LIST OF EXECUTIVE COMMITTEE MEMBERS IS PROPOSED 13 RECOMMENDED SLATE FOR NEXT YEAR IS THE SAME. AND I WANT TO 14 TAKE THIS MOMENT, WE KNOW 2021 IS GOING TO BE A -- ONCE AGAIN, 15 16 ANOTHER CHALLENGING YEAR. COVID IS NOT GOING ANYWHERE IN THE NEAR FUTURE AND AS WELL AS SOME OF THE OTHER CHALLENGES WE 17 SPOKE OF. THE EXECUTIVE COMMITTEE ENGAGES AND HIS ACTIVE 18 DISCUSSIONS AND PROVIDES LEADERSHIP TO THE MTC STAFF IN DOING 19 THAT. IT'S VERY EXCITING TO BE INVOLVED IN THIS PROCESS IN 20 21 THIS COMMITTEE, WE HAVE RECENTLY EXPANDED INTO INTERNATIONAL MARKETS AND WE'RE EXPLORING OTHER MARKETS SO WHILE YOU SEE THE 22 LIST OF MEMBERS THAT ARE BEING PROPOSED FOR NEXT YEAR, WE 23 STILL CAN ACCOMMODATE A FEW MORE MEMBERS TO THE EXECUTIVE 24

COMMITTEE, AND I ENCOURAGE YOU, IF YOU ARE THINKING ABOUT



- 1 DISCOVERING MORE IN THIS ARENA, OR WANTING TO SUPPORT THE
- 2 EFFORTS OF OUR JPA, THAT YOU REACH OUT TO RYAN OR TO JENNY, OR
- 3 EVEN TO MYSELF TO TALK ABOUT WHAT ARE -- WHAT WE DO, HOW WE DO
- 4 IT, WHAT ARE THE IMPACTS ON OUR SCHEDULES, AND THE WHOLE
- 5 THING. SO, WITH THAT I WILL OPEN UP THE FLOOR FOR A MOTION TO
- 6 FOR TO ACCEPT THE ABAG EXECUTIVE BOARD OF DIRECTORS EXECUTIVE
- 7 COMMITTEE FOR CALENDAR YEAR 2021.

9 SPEAKER: THIS IS MELISSA I'LL MAKE A MOTION TO APPROVE THE

10 EXECUTIVE DIRECTORS FOR 2021.

12 DAVE BREES, CHAIR: THANK YOU. IS THERE A SECOND?

14 CHRIS SCHROEDER: CHRIS SCHROEDER, SECOND.

16 DAVE BREES, CHAIR: IS THERE ANY DISCUSSION? IS THERE ANYONE AT

17 THIS TIME WHO WANTED TO VOLUNTEER THEIR NAME.

19 ANDRE DUUVOORT: THIS IS ANDRE DUURVOORT FROM CUPERTINO. THE

- 20 OPPORTUNITIES AND CHALLENGES YOU DISCUSSED ARE STARK FOR US IN
- 21 THE NEXT FEW YEARS I WANT TO THANK YOU THANKS FOR THE WORK THE
- 22 EXECUTIVE COMMITTEE HAS DONE AND HAS ALLOWED ME TO CONTRIBUTE
- 23 AND MAYBE THIS IS A PITCH FOR OTHERS WHO MAY BE CONSIDERING
- 24 JOINING THE EXECUTIVE COMMITTEE. THIS IS AN ORGANIZATION
- 25 THAT'S REALLY IN A UNIQUE PLACE, AT A UNIQUE TIME, AS YOU

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11

13

15



- 1 MENTIONED ALREADY, THE INTEREST THAT WE HAVE IN OUR CORE
- 2 MISSION TO PROVIDE PRICE STABILITY AND HOPEFULLY PRICE SAVINGS
- 3 VERSUS PG&E IS ABSOLUTELY CRITICAL BUT ALSO AS WE DISCUSSED IN
- 4 PAST EXECUTIVE COMMITTEE MEETING, HOW WE FIT INTO THE
- 5 DECARBONIZATION AND SUSTAINABILITY PATH IS ALSO, I THINK, AN
- 6 AREA OF GREAT OPPORTUNITY FOR US. AND I JUST WANTED TO SAY
- 7 THANKS TO STAFF FOR FOLLOWING UP ON SOME OF THOSE DISCUSSIONS
- 8 THAT WE HAVE HAD, AND WE WILL CONTINUE TO HAVE, LATER ON IN
- 9 THIS BOARD MEETING. SO CONSIDER THIS A PITCH TO OTHER CITIES
- 10 AND COUNTY WHO IS MAY BE INTERESTED. IT'S A VERY INTERESTING
- 11 PLACE THAT WE OCCUPY, AND IT'S A GREAT GROUP TO BE A PART OF.

- 13 DAVE BREES, CHAIR: THANK YOU ANDRE. OKAY. WELL, IF THERE IS
- 14 ANYBODY ELSE? WHICH I'M NOT SEEING ANY. IF THERE ARE, SPEAK
- 15 UP. OKAY. SO WITH THAT I'M GOING TO INVITE THE CLERK TO SEE IF
- 16 THERE IS ANY PUBLIC COMMENT ON THIS ITEM.

17

12

- 18 CINDY CHEN, CLERK: I DO NOT SEE ANY PUBLIC COMMENTS FOR THIS
- 19 ITEM.

20

- 21 DAVE BREES, CHAIR: OKAY. SEEING NONE, THEN I'LL INVITE YOU TO
- 22 CONDUCT THE ROLL, VOTE.

- 24 CINDY CHEN, CLERK: YEP. I'LL FOLLOW THE SAME ROLL CALL ORDER.
- 25 PLEASE BE READY TO UNMUTE YOURSELF TO STATE YOUR VOTING



- 1 OPTION. [ROLL CALL VOTE] WITH THAT, I HAVE 21. THE MOTION
- 2 PASSES. THANK YOU.

3

- 4 DAVE BREES, CHAIR: GREAT. THANK YOU CINDY. NOW I WOULD LIKE TO
- 5 INTRODUCE BRAD PAUL, WHO IS GOING TO GIVE US AN UPDATE ON
- 6 ABAG/MTC AND THE LOCAL GOVERNMENT SERVICES.

7

8 BRAD PAUL: THANKS. CAN YOU HEAR ME?

9

10 DAVE BREES, CHAIR: WE CAN.

- 12 BRAD PAUL: LET'S PUT THE NEXT SLIDE SHOW UP. I THINK WE HAVE
- 13 SEEN THE FIRST FEW SLIDES. I HAVE A LOT OF SLIDES TO COVER BUT
- 14 I WANT TO LEAVE TIME FOR QUESTIONS AT THE ENDS AND ENCOURAGE
- 15 YOU AFTER THIS MEETING IF YOU HAVE ANY OUESTIONS TO GET IN
- 16 TOUCH WITH ME MY E-MAIL ADDRESS SHOULD BE ON THE NEXT SLIDE.
- 17 MANY OF YOU KNOW ABAG WAS FOUNDED BACK IN 1961 BY THE
- 18 JURISDICTIONS IN THE BAY AREA TO BOTH PROVIDE THEM WITH
- 19 SERVICES BUT ALSO TO REPRESENT THEM REGIONALLY AND SACRAMENTO.
- 20 NEXT SLIDE. IN MAY OF 2016 MANY OF YOU MAY KNOW THAT THE ABAG
- 21 EXECUTIVE BOARD AND THE MTC COMMISSION VOTED TO CONSOLIDATE
- 22 THE TWO STAFFS INTO A SINGLE STAFF THAT WOULD GOVERN BOTH
- 23 ASSOCIATIONS. SO AS WE CONSOLIDATED WE HAD ONE STAFF SERVING
- 24 TWO BOARDS AND ABOUT 300 STAFF IN THIS BUILDING AT 375 BEALL
- 25 SINCE SOME OF US HAVE NOT BEEN IN SINCE THE SHELTER-IN-PLACE



- 1 ORDER INCLUDING MYSELF. NEXT SLIDE. THIS WILL GIVE SOME SENSE
- 2 OF THE STRUCTURE OF ABAG. THERE IS A CONTRACT AT THE TOP, YOU
- 3 SEE ABAG ON THE LEFT, AND MTC TO THE RIGHT. THE LINE THAT
- 4 CONNECTS THEM IS THE CONTRACT FOR SERVICES, CONTRACT ABAG HAS
- 5 WITH MTC TO PROVIDE THIS CONSOLIDATED STAFF SUPPORT. THERE ARE
- 6 AT THE BOTTOM STANDING COMMITTEES WE HAVE DONE TWO THINGS THIS
- 7 YEAR. WE COMBINED THE ABAG AND MTC LEGISLATIVE COMMITTEES INTO
- 8 A SINGLE COMMITTEE, THAT'S A WAY TO STREAMLINE THE PROCESS AND
- 9 HAVE BOTH BOARDS SHARE IDEAS AND ADVICE ON LEGISLATION. WE
- 10 ALSO RECENTLY COMMITTED AN ABAG HOUSING COMMITTEE, NEWLY
- 11 CREATED BACK IN MAY. NEXT SLIDE. THIS IS MTC, AND THE
- 12 CONSOLIDATED STAFF, AND ON THE LEFT IS LOCAL GOVERNMENT
- 13 SERVICES WHICH AM THE DEPUTY EXECUTIVE DIRECTOR OF, AND I'M
- 14 GOING TO GO THROUGH THE PROGRAMS POWER AND BAYREN TO GIVE YOU
- 15 THE BREADTH OF LOCAL SERVICES ABAG STILL OFFERS THE 101
- 16 JURISDICTIONS IN THE 101 CITIES AND NINE COUNTIES. NEXT SLIDE
- 17 PLEASE. THERE IS A NUMBER OF THINGS THAT ABAG IS RESPONSIBLE
- 18 FOR AND OF COURSE THERE IS RHNA. AND I KNOW YOU ALL HAVE BEEN
- 19 FOLLOWING THIS. THIS HAPPENS EVERY EIGHT YEARS RHNA
- 20 METHODOLOGY COMMITTEE JUST CONCLUDED WORK AND MADE A
- 21 RECOMMENDATION TO THE REGIONAL PLANNING COMMITTEE AND ABAG
- 22 EXECUTIVE BOARD GOING THROUGH MORE STEPS BEFORE IT'S FINALIZED
- 23 I'LL BE HAPPY TO ANSWER OUESTIONS ABOUT THAT LATER. I'LL GO TO
- 24 THE NEXT SLIDE. ABAG OR A.B. 1487 CREATED A NEW BAY AREA
- 25 HOUSING FINANCE ACT AND FINANCE AUTHORITY. THIS IS A MUCH



- 1 LARGER PIECE OF WORK THAT'S LOOKING AT HOW WE, AS A REGIONAL
- 2 AGENCY CAN PROVIDE SUPPORT TO ALL OF YOU, NOT ONLY IN MEETING
- 3 YOUR NEW HIGHER RHNA NUMBERS BUT IN JUST DOING THE HOUSING
- 4 WORK YOU WANT TO DO. AND AGAIN I CAN SPEAK MORE ABOUT THAT IN
- 5 DETAIL BUT THE IDEA IS TO PROVIDE MONEY THROUGH REAP, THE
- 6 REGIONAL EARLY ACTION PLANNING PROGRAM. IT'S NEW COMING OUT IN
- 7 THE NEXT MONTH OR SO THAT YOU WILL BE ABLE TO ACCESS FOR MONEY
- 8 TO HELP FUND PLANNING DEPARTMENT TO DO THE NEXT HOUSING
- 9 ELEMENT AND DOING HOUSING WORK IN GENERAL GOING FORWARD. NEXT
- 10 SLIDE. THE PLANNED BAY AREA WHICH WAS A TWO STEP PROCESS WE
- 11 CAN HORIZON LOOKING AT A NUMBER OF DIFFERENT POTENTIAL
- 12 SCENARIOS AND PLANNED BAY AREA 2050 WHICH AGAIN IS IN THE SAME
- 13 SORT OF POSITION AS RHNA IS RIGHT NOW. IT'S NOT FINALIZED YET
- 14 BUT WE HAVE A FINAL BLUEPRINT THAT WE'RE GOING TO BE
- 15 ANALYZING. THAT WILL BE APPROVED NEXT SUMMER SOMETIME. NEXT
- 16 SLIDE. WE CAN GO TO THE NEXT ONE. THE HORIZON PROGRAM LOOKED
- 17 AT THREE POSSIBLE SCENARIOS. NEXT SLIDE. LOOKED ACROSS FOUR
- 18 TYPES OF ISSUES, TRANSPORTATION, LAND USE, AND IN THIS PLAN,
- 19 NEWLY, WE LOOK AT ECONOMIC DEVELOPMENT AND RESILIENCE IN
- 20 PLANNED BAY AREA 2050. THOSE ARE THE NEW AREAS. NEXT SLIDE. WE
- 21 HAVE GUIDING PRINCIPLES AROUND AFFORDABLE CONNECTIVNESS,
- 22 DIVERSITY, HEALTH, AND VIBRANCY. NEXT SLIDE. AND WE LOOKED AT
- 23 THREE FUTURES, SORT OF WHAT IF. ONE WAS CALLED RISING TIDES
- 24 AND FALLING FINANCES IF FEDERAL GOVERNMENT CUTS FUNDING TO
- 25 STATES AND REGIONS. SECOND CLEAN AND GREEN, TECHNOLOGIES AND



- 1 CREATING TELECOMMUTING DISTRIBUTES JOB CENTERS. AND WHAT IF
- 2 ECONOMIC BOOM AND NEW TRANSPORTATION OPTION SPUR A NEW WAVE OF
- 3 DEVELOPMENT. NEXT SLIDE. THE REASON WE DID THIS IS TO LOOK AT
- 4 STRATEGIES, WHICHEVER ONE OF THOSE COMES TRUE, SO IF A
- 5 STRATEGY IS BENEFICIAL AND ADVANCES THE REGION AROUND ANY ONE
- 6 OF THOSE THREE STRATEGIES WE WERE LOOKING FOR THOSE KIND OF
- 7 THINGS. KEY TO PLANNED BAY AREA IS WHAT IS CALLED PRIORITY
- 8 DEVELOPMENT AREAS. THESE ARE AREAS WHERE WE EXPECT DEVELOPMENT
- 9 TO TAKE PLACE IN THE FUTURE. THERE ARE TWO NEW THINGS. IN THE
- 10 LAST PLAN WE HAD PRIORITY CONSERVATION AREAS WHICH IS THE FLIP
- 11 SIDE OF THAT WHAT AREAS IN THE REGION DO THE CITIES AND
- 12 COUNTIES WANT TO PRESERVE. IS THE NEW ONE IN THIS PLANNED BAY
- 13 AREA IS THE PRIORITY PRODUCTION AREAS. WHERE ARE THE JOB
- 14 CENTERS, TRADITIONALLY JOB CENTERS LIKE WAREHOUSING AND
- 15 MANUFACTURING, THAT WE WANT TO PRESERVE. NEXT SLIDE. I'LL GET
- 16 TO THE PROGRAMS. THERE ARE A NUMBER OF ABAG PROGRAMS THAT DEAL
- 17 WITH RESILIENCE. THIS IS ONE THAT WAS DONE BY THE PLANNING
- 18 DEPARTMENT AND THIS HAS TO DO WITH EARTHOUAKE PREPAREDNESS.
- 19 NEXT SLIDE. THIS IS A BOOKLET THAT CAME OUT, IF YOU HIT THE
- 20 ADVANCE SLIDES IT WILL DO ANIMATION HERE. IT LOOKS AT WHAT ARE
- 21 THE FEATURES OF EACH TYPE OF HOUSE WHERE YOU COULD HAVE
- 22 WEAKNESSES TO AN EARTHQUAKE. NEXT SLIDE. HIT IT AGAIN, AGAIN,
- 23 AND ONE MORE TIME. AND THEN IT HAS A SERIES OF STEPS YOU COULD
- 24 DO TO STRENGTHEN THE HOUSE AGAINST EARTHQUAKE DAMAGE IN THE
- 25 FUTURE. THIS IS AN EARTHQUAKE FIELD GUIDE THAT WAS PUT OUT BY



- 1 THE PLANNING DEPARTMENT. NEXT SLIDE. NOW BACK TO LOCAL
- 2 GOVERNMENT SERVICES. I'M NOT GOING TO GO INTO ABAG POWER. YOU
- 3 ALL KNOW THAT. SO LET'S GO TO THE NEXT SLIDE, WHICH IS ABAG
- 4 POWER. YOU ARE FAMILIAR WITH THIS. NEXT SLIDE AFTER THAT, HAS
- 5 TO DO WITH BAYREN. I THINK YOU ARE FAMILIAR WITH THIS. BUT
- 6 THIS IS A SERIES OF PROGRAMS THAT ARE ALSO ARE PART OF ENERGY
- 7 AT ABAG THAT HELP SINGLE AND MULTI-FAMILY HOMEOWNERS AS WELL
- 8 AS COMMERCIAL TO MAKE THEIR BUILDINGS MORE EFFICIENT AND PASS
- 9 THE SAVINGS ON TO THE PROPERTY OWNERS, WE ALSO DO CODES AND
- 10 STANDARDS WORK HELPING COMMUNITIES DO REGION CODES TO HELP
- 11 THEIR COMMUNITIES AND BUILDING CODES TO PUT THOSE TOGETHER AND
- 12 THE WATER BILL SAVINGS PROGRAM WILL HELP COMMUNITIES LIKE
- 13 YOURS REDUCE WATER USAGE FOR SINGLE AND MULTI-FAMILY HOMES.
- 14 NEXT SLIDE. AGAIN THIS IS ANOTHER SLIDE THAT HAS TO DO WITH
- 15 BAYREN. NEXT SLIDE. AND I WANT TO POINT OUT THAT BAYREN HAS
- 16 RECEIVED A NUMBER OF AWARD IN RECENT YEARS. THESE ARE THREE
- 17 RECEIVED IN EARLY TO LATE 2019. NEXT SLIDE. AND BAYREN IS
- 18 CONSIDERED ONE OF THE PREMIER ENERGY CONSERVATION PROGRAMS IN
- 19 CALIFORNIA. NEXT SLIDE. THE WATER BILL SAVINGS PROGRAM IS
- 20 GOING TO WORK MUCH LIKE THE ENERGY PROGRAMS WITH ONE
- 21 ADDITIONAL ADVANTAGE OR BENEFIT. THERE WILL BE NO UPFRONT
- 22 PAYMENT OR NEW DEBT FOR PEOPLE WHO HAVE SIGNED UP WE TESTED
- 23 THIS IN WINDSOR AND EAST BAY, IT HAS REDUCED WATER BILLS BY 25
- 24 PERCENT WHICH IS IMPORTANT BOTH IN A TIME OF DROUGHT WHICH
- 25 WE'RE IN RIGHT NOW BUT ALSO FOR PEOPLE LOOKING TO SAVE MONEY



IN THEIR FAMILY BUDGETS. WHAT HAPPENS IS THESE CONTRACTOR WHO 1 2 IS HAVE BEEN VETTED, GO IN, LOOK AT YOUR HOUSE AND SAY IF YOU 3 DO THESE SEVEN THINGS YOU CAN REDUCE YOUR WATER USAGE. THEY GO IN AND DO THE WORK SO YOU DON'T PUT MONEY UP FRONT AND THEY 4 5 CHARGE YOUR ENERGY BILL OVER TIME COUPLE OF YEARS OR FIVE YEARS PAY BACK, THE WORK THAT WAS DONE BUT DAY ONE ALREADY 6 LEAVES YOU WITH SAVINGS ON YOUR FIRST BILL. THIS IS ROLLING 7 8 OUT NEXT YEAR. NEXT SLIDE. ESTUARY PARTNERSHIP BEEN AROUND FOR MANY YEARS DEDICATED TO IMPROVING THE QUALITY OF THE WATER IS 9 EXPERIENCE ON THE ESTUARY ON THE BAY ITSELF AND GOING UP INTO 10 THE DELTA. NEXT SLIDE. THEY WERE INVOLVED WITH AS SOME OF YOU 11 WERE IN PASSING MEASURE AA IN 2016, THAT WAS A MEASURE THAT 12 WENT ON ACROSS NINE BAY AREA COUNTIES. IT'S A PARCEL TAX OF 13 \$12 PER PARCEL PER YEAR AND GENERATES \$25 MILLION IN THE NEXT 14 15 20 YEARS. THAT'S A HALF A BILLION DOLLARS. THERE'S A GROUP 16 SETUP CALLED SAN FRANCISCO RESTORATION AUTHORITY THAT PROVIDES GRANTS AND THEY'RE WORKING ON NATURAL HORIZONTAL LEVY THAT 17 DEFENDS AGAINST SEA LEVEL RISE THERE ARE A COUPLE THEY'RE 18 WORKING ON RIGHT NOW AND MORE TO COME. FAN AND ACFA ARE 19 FINANCING AUTHORITIES THAT WE CAN HELP YOU AND MEDIUM SIZE 20 21 CITIES TO ISSUE BONDS FOR A NUMBER OF THINGS. NEXT SLIDE. SINCE 1978 WHEN WE STARTED THIS, WE ISSUED \$8 BILLION IN TAX 22

EXEMPT FINANCING. NEXT SLIDE. THERE IS A LIST. 12,000 UNITS OF

DISTRICTS, MUNICIPAL INFRASTRUCTURE, MUSEUMS, I THINK THERE IS

HOUSING, NEXT SLIDE, SCHOOLS, HOSPITALS AND CLINICS, WATER

Errors and omissions within this transcript have likely occurred. This document is provided as a convenience only.

23

24



ONE MORE, AND COMMUNITY FINANCE DISTRICTS. NEXT SLIDE. SO IF 1 YOU HAVE ANY NEEDS FOR THAT, GIVE ME A CALL, WE CAN SETUP A 2 3 MEETING WITH YOU TO HELP YOU GO THROUGH THE PROCESS TO GET TAXES -- TAX EXEMPT FUNDING. IT'S LOW COST. WE HAVE STAFF 4 5 EXPERIENCED IN THIS. NEXT SLIDE. SAN FRANCISCO BAY TRAIL HAS BEEN WORKING FOR MANY YEARS TO CREATE 500 MILES OF BIKE AND 6 PEDESTRIAN TRAILS THAT RING THE BAY. WE SO FAR HAVE COMPLETED 7 8 360 MILES. THAT'S THE GOOD NEWS THE BAD NEWS IS THE NEXT 340 MILES ARE GOING TO BE HARDER AND MORE EXPENSIVE BUT WE'LL GET 9 IT DONE. NEXT SLIDE. AGAIN, INITIATED IN 1989 WE HAVE ABAG 10 STAFF WORKING ON THIS AND A 30 MEMBER NON-PROFIT BOARD SIMILAR 11 TO YOU THAT ADVISE US ON THAT PROGRAM. NEXT SLIDE. THE BAY 12 TRAIL WATER -- THERE IS A WATER TRAIL WHICH IS A NUMBER OF 13 SITES AROUND THERE AROUND THE EDGE OF THE BAY THAT ALLOW FOR 14 15 LAUNCHING AND LANDING FOR NON-MOTORIZED BOATS, PADDLE BOARDS 16 KAYAKS OPENING UP THE WATERFRONT TO ANYONE IN THE BAY AT LOW COST. NEXT SLIDE. NEXT SLIDE. AND THAT'S THE END OF MY 17 PRESENTATION. AND I WILL TAKE ANY OUESTIONS YOU HAVE AND TRY 18 TOO ANSWER THEM AS BEST I CAN, OR YOU CAN GET IN TOUCH WITH ME 19 20 DIRECTLY. 21 ANDRE DUUVOORT: HI BRAD. THIS IS ANDRE DUURVOORT WITH THE CITY 22 OF CUPERTINO. I WAS CURIOUS TO LEARN ABOUT THE RESILIENCE 23

PROGRAM GRANTS. HOW WOULD AN AGENCY FIND OUT MORE ABOUT WHAT

KIND OF ACTIVITIES COULD BE ELIGIBLE FOR THOSE GRANT FUNDS?

24



1 BRAD PAUL: IF YOU GO ON THE SAN FRANCISCO ESTUARY PARTNERSHIP 2 3 WEB SITE THERE IS A PAGE ABOUT THE GRANTS COMING OUT ABOUT THE SAN FRANCISCO BAY RESTORATION AUTHORITY. YOU COULD ALSO GO ON 4 5 THE SAN FRANCISCO RESTORATION AUTHORITY WEB SITE AND IT TALKS ABOUT THE TYPES OF GRANTS THEY HAVE MADE SO FAR, THE AMOUNTS 6 OF THOSE GRANTS, AND THE TIMELINE, THERE IS PERIODICALLY A NEW 7 8 RFP FOR PROPOSALS AND DESCRIBES WHAT YOU NEED TO SUBMIT TO DO THAT. BUT, I WANT TO MENTION ONE MORE TIME, IN HAYWARD, THERE 9 IS ONE OF THESE HORIZONTAL LEVIES IT'S BEEN GOING ON FOR TEN 10 YEARS AND IT USES TIDAL ACTION AND SILTS TO BUILD UP A BARRIER 11 TO THE WATERFRONT THERE AND IN TEN YEARS THAT BARRIER HAS GONE 12 UM ALMOST THREE FEET IT ALSO HAS VEGETATION GROWING ON IT IT'S 13 A WILDLIFE HABITAT IT PROVIDES OPPORTUNITY TO GET OFF THE 14 15 NATURE PATH AND IT PROTECTS PARTS OF THE BAY FROM SEA LEVEL 16 RISE AND I KNOW THE BAY AREA RESTORATION AUTHORITY IS ALSO INTERESTED IN THOSE PROJECTS AS WELL. 17 18 ANDRE DUUVOORT: THANK YOU. 19 20 21 BRAD PAUL: AND MY E-MAIL ADDRESS IS BPAUL@BAYAREAMETRO.GOV. AND I WELCOME ANY COMMENTS, SUGGESTIONS OR QUESTIONS YOU HAVE, 22 WOULD BE HAPPY TO SETUP A CALL OR ZOOM MEETING TO TALK ABOUT 23 ANY OF THE PROGRAMS I JUST TALKED ABOUT, PEOPLE OFTEN ARE 24 INTERESTED IN ONE OR TWO PROGRAMS, BUT STAFF WOULD BE HAPPY TO 25



- 1 HOOK YOU UP. I ALSO WANT TO SAY I AM SO PROUD OF BOTH POWER
- 2 STAFF, JENNY, RYAN, CINDY, AND THE REST OF THE ENERGY PROGRAM
- 3 STAFF THAT WORK ON BAYREN, THEY'RE DOING AN INCREDIBLE JOB
- 4 WITH A LOT OF STATE GRANT MONEY GETTING OUT THE DOOR TO PEOPLE
- 5 THAT REALLY NEED IT.

6

- 7 DAVE BREES, CHAIR: GREAT. THANK YOU VERY MUCH, BRAD, I TOO,
- 8 AGREE WITH THOSE COMPLIMENTS TO OUR STAFF, AND I KNOW THAT OUR
- 9 PLANNING STAFF WILL PROBABLY HAVE A LOT MORE QUESTIONS ON THE
- 10 RHNA NUMBERS ALSO IN DOING THAT. THE. OKAY. THAT TAKES US TO
- 11 OUR NEXT AGENDA ITEM, WHICH IS NUMBER SEVEN, THIS IS AN
- 12 INFORMATION ITEM, STAFF REPORT AND REVIEW OF OUR NATURAL GAS
- 13 PROGRAM. RYAN?

- 15 RYAN JACOBY: GREAT THANKS DAVE AND VERY NICELY PUT, I KNOW THE
- 16 RHNA FOLKS HAVE THEIR HANDS FULL, AS WE'RE PROBABLY ALL AWARE.
- 17 IF YOU COULD ASK THE AV FOLKS TO PULL UP THE NATURAL GAS
- 18 PRESENTATION, PLEASE. ONE PRESENTATION PRIOR TO THIS. IN
- 19 MEANTIME, I WANT TO SAY THOSE WITH YOUR CAMERAS ON, IT'S NICE
- 20 TO SEE YOU. IT'S NOT QUITE AS ACCOMMODATING AS IT HAS BEEN IN
- 21 THE PAST AT THE BAY AREA METRO CENTER. I APPRECIATE IT. I AM
- 22 RYAN JACOBY PROGRAM MANAGER FOR POWER AND WILL WALK YOU
- 23 THROUGH THE PROGRESS WE HAVE MADE IN THE LAST FISCAL YEAR.
- 24 STARTING FROM THE BEGINNING ABAG POWER JPA WAS CREATED BY ABAG
- 25 AND LOCAL GOVERNMENTS ABOUT 20 YEARS AGO TO PROVIDE LEADERSHIP



- 1 AS THE ENERGY INDUSTRY WAS DEREGULATED. JPA CONSISTED OF GAS
- 2 AND ELECTRIC PROGRAMS BUT THE ELECTRIC PROGRAM WAS SHORT-LIVED
- 3 BECOMING A VICTIM OF VOLATILE PRICING AND PG&E. THE PROGRAM
- 4 CONTINUES TO THIS DAY OFFERING GAS PURCHASING AND
- 5 TRANSPORTATION, AND CUSTOMER SERVICE. WHILE THE ORIGINAL
- 6 CURRENT GOALS OF THE PROGRAM ARE TO OFFER COMPETITIVE AND
- 7 STABLE RATES YOU WILL HEAR MORE THROUGHOUT THIS PRESENTATION
- 8 REGARDING OUR EFFORTS WHETHER IT'S PURSUING ALIGNING WITH THE
- 9 PROGRAM WITH THE STATE'S MORE RECENT GOALS REGARDING
- 10 GREENHOUSE GAS EMISSIONS REDUCTIONS, WE SEE THIS AS COMING
- 11 FULL CIRCLE TO REINVIGORATE THE IDEAS OF LEADERSHIP THAT THE
- 12 PROGRAM WAS FOUNDED ON. BOTH DAVE AND ANDRE MADE COMMENTS
- 13 ABOUT THIS EARLIER IN THE PRESENTATION. SO I APPRECIATE ADDING
- 14 THAT AS AN ELEMENT TO THIS DISCUSSION. NEXT SLIDE PLEASE. AS
- 15 YOU HEARD EARLIER, THERE ARE CURRENTLY 38 PARTICIPATING
- 16 MEMBERS IN THE GAS PROGRAM. MANY OF WHOM ARE HERE TODAY. AS A
- 17 REMINDER, EACH MEMBER IS PROVIDED EQUAL VOTING POWER
- 18 REGARDLESS OF THE NUMBER OF ACCOUNTS OR ANNUAL GAS USAGE. AS
- 19 WAS APPROVED EARLIER THIS MORNING, YOU ALSO SEE HERE THE SIX
- 20 MEMBER EXECUTIVE COMMITTEE THAT WILL CONTINUE TO MEET
- 21 BIMONTHLY DURING THE UPCOMING YEAR TO DISCUSS THESE ISSUES
- 22 MORE IN DEPTH. AS DAVE PREVIOUSLY MENTIONED WE ARE OPEN TO
- 23 SPEAKING TO INTERESTED PARTIES ABOUT MEMBERSHIP ON THAT
- 24 COMMITTEE, SO PLEASE FEEL FREE TO REACH OUT IF THAT'S YOU.
- 25 NEXT SLIDE. SHOWN HERE ON THE IN-HOUSE OFFICERS AND PRINCIPLE



- 1 STAFF LED BY THERESE MCMILLAN FOR THE AGENCY OF CONSOLIDATED
- 2 STAFF UNDER MTC. I WOULD ALSO LIKE TO ACKNOWLEDGE AND THANK
- 3 MATT LAVRINETS, MTC FOR HIS GUIDANCE OF THE PROGRAM
- 4 PARTICULARLY SINCE WE HAVE MADE SIGNIFICANT CHANGES OVER THE
- 5 PAST TWO YEARS YOU HEARD ABOUT THE AUDITED FINANCIAL
- 6 STATEMENTS WITH OUR EXPANSION INTO INTERNATIONAL PURCHASING
- 7 TWO YEARS AGO BUT AS YOU WILL LEARN THROUGHOUT THE
- 8 PRESENTATION THERE HAVE BEEN SIGNIFICANT OTHER CHANGES WE'LL
- 9 COVER TOO. NEXT SLIDE PLEASE. IN TERMS OF THE ACTUAL OPERATING
- 10 ENVIRONMENT, ABAG POWER IS SIMILAR TO THE COMMUNITY CHOICE
- 11 ENERGY MODEL EXCEPT THAT IT'S ON THE NATURAL GAS SIDE. IN THAT
- 12 WE ADOPT A GENERAL GAS PURCHASING STRATEGY TO PURCHASE GAS AT
- 13 VARIOUS POINTS EITHER WITHIN THE STATE OUT OF STATE OR
- 14 INTERNATIONALLY AND THEN ARRANGE FOR TRANSPORTATION TO PG&E
- 15 GAS INFRASTRUCTURE WHERE THEY DISTRIBUTE THE GAS LOCALLY TO
- 16 EACH FACILITY IN THE PROGRAM. IN THIS MODEL, PG&E RETAINS THE
- 17 OWNERSHIP AND MAINTENANCE RESPONSIBILITIES FOR THE
- 18 INFRASTRUCTURE AS WELL AS FOR PERFORMING BASIC UTILITY
- 19 FUNCTION SUCH AS METER READING AND MARKING UNDERGROUND LINES.
- 20 ONE PRIMARY DIFFERENCE BETWEEN THE PROGRAMS IS ABAG OFFERS
- 21 CONSOLIDATED BILLING MEANING WE CONSOLIDATE PG&E CHARGES WITH
- 22 OUR OWN THEN BILL EACH PROGRAM PARTICIPANT FOR THE COMBINED
- 23 CHARGES. BECAUSE OF THIS CINDY AND I ARE ABLE TO PROVIDE
- 24 CUSTOMER SERVICE AND ACCOUNT MANAGEMENT THAT IN MOST CASES
- 25 ALLOWS YOU TO BYPASS PG&E'S CUSTOMER SERVICE ALTOGETHER. NEXT



- 1 SLIDE PLEASE. ON A DAILY BASIS, OUR OPERATIONS CONSIST OF
- 2 MANAGING GAS PURCHASES, AND MONITORING PRICING MARKETS ALONG
- 3 WITH MANAGING STORAGE AND IN-BALANCE ACCOUNTS ALL OF THOSE
- 4 HAVE BEEN MORE CHALLENGING THIS YEARS THAN IN THE PAST DUE TO
- 5 SIGNIFICANT USAGE SWINGS CAUSED BY COVID AND WARM WEATHER I'LL
- 6 GET INTO THAT IN MORE DETAIL IN A FURTHER SLIDE. IN ADDITION
- 7 THOSE WE INDIVIDUALLY VALIDATE EACH ACCOUNT'S BILLING DATA TO
- 8 VERIFY USAGE AND COST ARE CONSISTENT WITH PRIOR TRENDS. IN THE
- 9 EVENT THAT DATA IS NOT CONSISTENT, YOU WILL MOST LIKELY
- 10 RECEIVE PROACTIVE COMMUNICATION FROM CINDY OR MYSELF THAT
- 11 SOMETHING SEEMS UNUSUAL. NEXT SLIDE PLEASE. AT A HIGH LEVEL,
- 12 THE BENEFITS OF PARTICIPATING IN THIS PROGRAM SET WITH PG&E IS
- 13 THREE FOLD FIRST IS PUBLIC OWNERSHIP, THAT GUARANTEES HIGH
- 14 LEVEL OF THE TRANSPARENCY AND PROVIDES FEEDBACK. THIS IS
- 15 ADAPTABLE TO THE CHANGING ENERGY LANDSCAPE WHILE NOT AN EASY
- 16 TASK ESPECIALLY FOR A GAS PROGRAM HAVING A SAY IN THE FUTURE
- 17 OF THE PROGRAM IS A BENEFIT NOT OFFERED WITH INVESTOR OWNED
- 18 UTILITIES. AS I SPOKE TO PREVIOUSLY, OUR IN-HOUSE CUSTOMER
- 19 SERVICE PROVIDES FASTER AND MORE PERSONAL RESPONSE APPROACH TO
- 20 ACCOUNT MANAGEMENT, RATE ANALYSIS, AND PAYER COMPARISONS. THE
- 21 SERVICES ALLOW YOU TO QUICKLY CONNECT WITH A DIRECT CONTACT TO
- 22 OBTAIN A NON-BIAS OPINION. IN INSTANCE WHERE WE DO NEED TO
- 23 REFER YOU TO PG&E WE WILL LEVERAGE OUR WORKING RELATIONSHIP TO
- 24 ENSURE PROMPT ASSISTANCE. LASTLY IT'S RARE AND VALUABLE TO
- 25 HAVE 38 PUBLIC AGENCIES ENGAGED IN A SINGLE PROGRAM. THE



- 1 ECONOMIES OF SCALE MAKE THIS PROGRAM AN ATTRACTIVE OPTION TO
- 2 FUNDING OPPORTUNITIES FROM THE CALIFORNIA ENERGY COMMISSION OR
- 3 THE PUBLIC UTILITIES COMMISSION. THE STRUCTURE OF THIS PROGRAM
- 4 PROVIDES UNIQUE OPPORTUNITIES THAT ARE CURRENTLY WORTH
- 5 EXPLORING THROUGH AN OPEN SOLICITATION FOR STRATEGIC PROGRAMS
- 6 AND SERVICES. WE ALSO EXPECT AS THE STATE CONTINUES TO
- 7 DECARBONIZE ITS ENERGY SOURCES THERE WILL BE FUNDING
- 8 OPPORTUNITIES THAT WILL BENEFIT THIS MEMBERSHIP. NEXT SLIDE.
- 9 TAKING A LOOK AT LAST YEARS'S PERFORMANCE YOU WILL NOTE NO
- 10 CHANGES TO THE PROGRAM'S MEMBERSHIP AS ARLEICKA DEFINED
- 11 EARLIER AND NO SIGNIFICANT CHANGES TO CORE OR NONCORE
- 12 ACCOUNTS. DECREASING ONE PERCENT ON COMPARISON. CORE ACCOUNTS
- 13 DEFINED HERE ARE SMALLER, COMMERCIAL OR RESIDENTIAL ACCOUNTS
- 14 WHEREAS NONCORE ACCOUNTS ARE NONCORE ACCOUNTS SUCH AS ELECTRIC
- 15 OR COGENERATION USES ON THE CHART TO THE RIGHT ARE THE
- 16 ACCOUNTS ALL CATEGORIZED AS CORE. YOU WILL SEE THOSE LISTED AS
- 17 SMALL COMMERCIAL, LARGE COMMERCIAL, NATURAL GAS VEHICLE, AND
- 18 RESIDENTIAL. THOSE COMBINED MAKE UP 85 PERCENT OF THE
- 19 PROGRAM'S USAGE THROUGHOUT THE LAST YEAR WITH THE REMAINING 15
- 20 PERCENT ASSOCIATED WITH NONCORE ACCOUNTS. OVERALL, THE
- 21 COMBINED USAGE CAME IN APPROXIMATELY FOUR PERCENT LOWER THAN
- 22 LAST YEAR, WITH A PRIMARY POSITIVES DRIVING THAT DECLINE BEING
- 23 COVID RELATED INTERMITTENT FACILITY CLOSURES AND ON AVERAGE
- 24 WARMER SEASON. NEXT SLIDE PLEASE. CONTINUING LAST YEAR'S
- 25 TREND, WE IMPLEMENTED SEVERAL SUCCESSFUL PROGRAMMATIC CHANGES



- 1 DURING ARE THE LAST FISCAL YEAR INCLUDING TRANSITION TO AN
- 2 INDEPENDENT STORAGE PROVIDER A WEB-BASED UTILITY DATABASE AND
- 3 ISSUANCE OF TWO PROCUREMENTS WITH ONE ONGOING. THE LEVELIZED
- 4 PAYMENT STRUCTURE WAS SUCCESSFUL IN ACHIEVING RATES THAT WERE
- 5 MORE STABLE THAN PG&ES BUT THE RATE WAS FIVE PERCENT HIGHER
- 6 THAN PG&E COMMERCIAL RATES THE RATES THAT WOULD APPLY TO MOST
- 7 ACCOUNTS IF THEY WERE ENROLLED IN PG&E SERVICE AS OPPOSED TO
- 8 OURS. SIMILAR TO OTHER ENERGY PROVIDERS, WE EXPERIENCE A
- 9 DECREASE IN THE USAGE CAUSED BY COVID, AS I DESCRIBED EARLIER.
- 10 WE'RE ATTRIBUTING HALF OF THAT FIVE PERCENT PREMIUM OR TWO AND
- 11 A HALF PERCENT, DUE TO THAT DECREASE AND USAGE ALSO CAUSED BY
- 12 COVID AND WARM WEATHER. WHAT THAT LOWER USAGE DOES FOR US,
- 13 SPECIFICALLY, IS THAT IT CAUSES THIS COST TO BE SPREAD OVER A
- 14 LOWER USAGE POOL RESULTING IN A HIGHER RATE. NEXT SLIDE
- 15 PLEASE. TAKING AN OVERARCHING LOOK AT THE IMPACTS OF COVID-19,
- 16 WE ARE SEEING UNPRECEDENTED DROPS IN ENERGY USE NOT JUST IN
- 17 OUR PROGRAM, BUT IN A WORLD-VIEW. THE MOST SIGNIFICANT
- 18 DECLINE, AS WE HAVE LIKELY ALL SEEN IN THE NEWS WOULD BE
- 19 AVIATION AND INDUSTRY SECTORS. THE DECLINE IN USAGE NORMALLY
- 20 PLACES DOWNWARD MARKET PRESSURE ON PRICES AS SUPPLIED AGAINST
- 21 THE OUTSTRIPPED DEMAND. AS A NATURAL REACTION TO REBALANCE THE
- 22 MARKET, SOME SUPPLIERS INSTALLED PRODUCTION TO BALANCE SUPPLY
- 23 AND DEMAND. IN THIS CASE HOWEVER, THE PUBLIC HEALTH
- 24 IMPLICATION OF THE CORONAVIRUS CAUSED WIDESPREAD FALLS IN
- 25 PRODUCTION IN THE NEAR TERM BOTH OF THESE EFFECTS SOMEWHAT



- 1 ANTICLIMACTIC WERE TEMPERED BY INVENTORIES. ULTIMATELY THERE
- 2 WERE A LOT OF MARKET FACTORS AT PLAY BUT THE OVERALL RESULT ON
- 3 MARKET PRICES AS I MENTIONED WAS SOMEWHAT ANTICLIMACTIC
- 4 THROUGHOUT LAST FISCAL YEAR. THAT'S NOT NECESSARILY THE CASE
- 5 TODAY BUT IT WAS DURING THE LAST FISCAL YEAR. PRICES IN JULY
- 6 BEGAN TO RISE AS GAS AND NEED FOR ELECTRICITY GENERATION
- 7 DECLINED DUE TO WEST COAST HEAT WAVES. SINCE JULY WE HAVE
- 8 EXPERIENCED MORE HEAT WAVES, IN ADDITION TO THE FIRES, WHICH
- 9 CAUSED LOCAL PRICES TO REMAIN WITHIN THE \$4 RANGE. YOU WILL
- 10 SEE A CHART LATER THAT SUMMARIZE WHAT IS THAT LOOKS LIKE IN
- 11 COMPARISON TO HISTORICAL AVERAGES. PRICES NOW HAVE CLIMBED
- 12 EVEN FURTHER TO THE 450 RANGE FURTHERMORE EFFECTS OF INSTALLED
- 13 PRODUCTION FROM MONTHS AGO ARE NOW BEING FELT ON THE SUPPLY
- 14 SIDE WITH NATIONAL PRICES AT A 19 MONTH HIGH AT THE NATIONAL
- 15 STANDARD. OTHER PARTICULARLY NEWS WORTHY MARKET IMPACTS WERE
- 16 SEVERAL HIGH PROFILE ENERGY COMPANY BANKRUPTCIES,
- 17 CONVERSATIONS SURROUNDING WHETHER PRE-COVID OIL DEMAND WOULD
- 18 EVER RETURN AND ACKNOWLEDGEMENTS OF INCREASES IN AIR OUALITY
- 19 AND WILDLIFE. AS MORE DIRECT IMPACTS AT A PROGRAMMATIC LEVEL,
- 20 WE HAVE ADAPTED OUR BILLING AND INVOICING PROCESSES TO BE
- 21 REMOTE AND ELECTRONIC VARIANTS. AS FAR AS THOSE ARE CONCERNED,
- 22 THIS WAS A GOOD OPPORTUNITY FOR US TO REVISIT SOFTWARE THAT WE
- 23 HAVE BEEN USING SINCE \$2,000.05. SECONDLY, WE SAW IMMEDIATE
- 24 DECREASES IN USAGE DURING MARCH, WHEN THE STATEWIDE SHELTER-
- 25 IN-PLACE ORDERS WERE ISSUED. WE LATER TURNED THIS INTO AN



- 1 OPPORTUNITY FOR THE PROGRAM, AND CAPITALIZED ON HIGH LOCAL
- 2 PRICES BY SELLING GAS TO SUPPLIERS DURING AUGUST. THIS
- 3 RESULTED IN ABOUT \$25,000 WORTH OF REVENUE GENERATION. NEXT
- 4 SLIDE PLEASE. A MENTIONED PREVIOUSLY, PRICES WERE LARGELY
- 5 ANTICLIMACTIC THIS YEAR EVEN WITH THE LARGE NUMBER OF MARKET
- 6 FORCES AT PLAY. TAKING A LOOK AT THE 20 YEAR HISTORICAL
- 7 AVERAGES AND THE CITY DATE INDEX WHICH WAS AT PG&E
- 8 INFRASTRUCTURE, WE CAN SEE LATE LAST FISCAL YEAR WE'RE STILL
- 9 IN THE FIVE YEAR HISTORICAL AVERAGE WITH ABOUT 3 TO \$4, THAT
- 10 HAS CLIMBED TO ABOUT \$4.50 SENDS, SO WE'RE NO LONGER IN THAT
- 11 AVERAGE. ULTIMATELY FINDING A TAG TO LABEL ALL THESE EVENTS
- 12 THAT HAVE OCCURRED THIS YEAR IS PROBABLY GOING TO BE THE MOST
- 13 CHALLENGING THING SORTED WITH THIS CHART. NEXT SLIDE PLEASE.
- 14 DRILLING DOWN ONE LAYER FURTHER, WE ABLE TO EXAMINE PRICE
- 15 POINTS. WITH CANADA ON THE PROCESS OF COST SAVINGS, THIS CHART
- 16 CLEARLY ILLUSTRATES EACH OF THE MONTHLY PRICE POINTS BY ORIGIN
- 17 INCLUSIVE OF TRANSPORTATION COST WHERE APPLICABLE. YOU WILL
- 18 NOTE THOSE TRANSPORTATION COSTS AS A SLIGHTLY DARKER GRADIENT
- 19 COMPARED TO THE LIGHTER COMMODITY COST FOR THE BAR CHARTS
- 20 ABOVE IT IN ADDITION TO THE BAR CHARTS IS A LINE TRACKING THE
- 21 MONTHLY AVERAGE PURCHASING LOCALLY AT PG&E CITY BASE.
- 22 SUMMARIZED IN THE RIGHT HAND CORNER IS THE WEIGHTED AVERAGE
- 23 COST OF GAS, NOTE, THE COST OF GAS PURCHASING IN CANADA,
- 24 TRANSPORTING GAS LOCALLY CAME IN AT \$0.35 PER DEKATHERM
- 25 CHEAPER THAN PURCHASING THAT GAS LOCALLY. IN ADDITION TO THE



- 1 BENEFITS OF RISKS OF DIVERSIFICATION THE STRATEGY HAS REMAINED
- 2 SUCCESSFUL IN LOWERING COST SIGNIFICANTLY COMPARED TO THE PG&E
- 3 CITY BASE INDEX. NEXT SLIDE PLEASE. RECOGNIZING THAT OUR
- 4 CHEAPEST OPTION IS TO IMPORT GAS FROM CANADA AS OPPOSED TO
- 5 PURCHASING LOCALLY, OUR PURCHASE QUANTITY IS LIMITED BY THE
- 6 EXISTING PIPELINE CAPACITY, WHICH CAPS US AT ABOUT 40 PERCENT
- 7 OF OUR ANNUAL GAS NEEDS. OVER THE NEXT YEAR, WE'LL CONTINUE TO
- 8 EXPLORE ADDITIONAL OPPORTUNITIES TO INCORPORATE ADDITIONAL
- 9 PRICING POINTS, AND REFINING EXISTING BUSINESS PROCESSES
- 10 WITHIN AN EYE TOWARDS BOTH COST SAVINGS AND ADDITIONAL PROGRAM
- 11 OFFERINGS. NEXT SLIDE PLEASE. AS ANDRE ALLUDED TO EARLIER, AND
- 12 LIKELY AS WE ALL KNOW FROM OUR INDIVIDUAL ROLES IN LOCAL
- 13 GOVERNMENT, THE ENERGY INDUSTRY IS RAPIDLY EVOLVING TOWARDS
- 14 DECARBONIZATION, THIS IS HAPPENING IN MANY DIFFERENT AREAS
- 15 SIMULTANEOUSLY BUT MOST EVIDENT THROUGH POLICIES LIKE SB100,
- 16 COMMUNITY CHOICE ENERGY, ELECTRIC OR HYDROGEN VEHICLES, AND
- 17 PREFERENTIAL BUILDING CODES. NEXT SLIDE PLEASE. ONE OF THE
- 18 MOST PRACTICAL ELEMENTS TOWARDS LOWERING GHG EMISSIONS FOR OUR
- 19 PROGRAM SPECIFICALLY IS RENEWABLE NATURAL GAS OR RNG. RNG IS
- 20 INTERESTING BECAUSE OF ITS POTENTIAL FOR LOWERING GREENHOUSE
- 21 GAS EMISSIONS, AND ITS INTERSECTION WITH ORGANIC WASTE STREAMS
- 22 THAT GOVERNMENTS ARE OFTEN ALREADY MANAGING, SOMETIMES WITH
- 23 ACCOMPANYING REVENUE STREAMS. OVER THE PAST FEW YEARS, WE
- 24 FOLLOWED RELEVANT REGULATORY PROCEEDINGS WITH THE MOST RECENT
- 25 DEVELOPMENT BEING A PROPOSED DECISION TWO DAYS AGO PERMITTING



- 1 LIMITED SALE OF RNG TO RESIDENTIAL CUSTOMERS WITHIN SAN DIEGO
- 2 GAS TERRITORIES. PG&E WAS NOT A PARTY NOR AN APPLICANT TO THAT
- 3 PROCEEDING, AND THEY HAVE NOT INDICATED THUS FAR THAT THEY
- 4 INTEND TO OFFER RNG TO THE SAME RESIDENTIAL AND COMMERCIAL
- 5 CUSTOMERS WITHIN THEIR SERVICE TERRITORY. WHILE WE'LL CONTINUE
- 6 TO EXPLORE RNG AS A VEHICLE FUEL WITHIN OUR PORTFOLIO, AND AIM
- 7 TO HAVE AN IN DEPTH COST BENEFIT ANALYSIS AS PART OF OUR
- 8 ONGOING RFQ OUR FEELING IS IT'S LARGELY COST PROHIBITIVE AS A
- 9 SUBSTITUTE TO SPACE AND WATER HEATING WHICH IS PRIMARY WITHIN
- 10 OUR PROGRAM. NEXT SLIDE PLEASE. ANOTHER RELATED AND
- 11 SIGNIFICANT EFFORT THAT KICKED OFF THIS YEAR IS A CPUC
- 12 PROCEEDING AND MANAGE OF STATE'S LONG-TERM PLANNING STRATEGY
- 13 FOR PHASING OUT FOSSIL DERIVED GAS AND ACCOMPANYING
- 14 INFRASTRUCTURE OVER THE NEXT 25 YEARS. IF YOU HAVE BEEN
- 15 FOLLOWING THIS PROCEEDING, YOU KNOW THAT IT'S SIGNIFICANT IN
- 16 THE ENERGY INDUSTRY. THE PROCEEDING CONSISTS OF TWO TRACKS
- 17 THAT WILL, IN THE FIRST TRACK COMPREHENSIVE EXAMINE THE
- 18 CURRENT SYSTEM RELIABILITY STANDARDS AND MARKET STRUCTURE FOR
- 19 REGULATIONS WITH REGARD TO MITIGATING PRICE VOLATILITY. IN THE
- 20 SECOND TRACT, WE'LL BEGIN LONG-TERM GAS POLICY AND PLANNING
- 21 AGAIN TO TRANSITION AWAY FROM GAS BASED ON THE PREMISE THAT
- 22 NATURAL GAS USE AND PARTICULARLY FOSSIL DERIVED GAS WILL
- 23 DECLINE OVER THE NEXT 20 YEARS AS A RESULT OF GREENHOUSE GAS
- 24 POLICY PLANNING. ABAG IS A PART OF THIS PROCEEDING, AND WILL
- 25 KEEP THE EXECUTIVE COMMITTEE INFORMED OF ANY SIGNIFICANT



- 1 DEVELOPMENTS. NEXT SLIDE PLEASE. LOOKING FORWARD, WE HAVE
- 2 HIGHLIGHTED THREE AREAS OF FOCUS THAT WILL PROVIDE VALUE FOR
- 3 PROGRAM PARTICIPANTS. THE FIRST IS A STRATEGIC PROGRAM DESIGN
- 4 RFO THAT WE'RE CURRENTLY CONCLUDING. RFO WILL BE KEY IN
- 5 IDENTIFYING, PRIORITIZING AND IMPLEMENTING FURTHER PROGRAM
- 6 CHANGES. THE PROCUREMENT IS SCHEDULED TO FORMALLY CONCLUDE AT
- 7 THE NEXT MEETING OF THE EXECUTIVE COMMITTEE SCHEDULED TO BE
- 8 HELD ON DECEMBER 9TH. ADDITIONALLY WE'LL CONTINUE MONITORING
- 9 FUNDING AND REGULATORY OPPORTUNITIES AS THEY DEVELOP. WE
- 10 EXPECT THAT THE STATE'S SIGNIFICANT MOMENTUM TOWARDS
- 11 DECARBONIZATION WILL AGAIN PROVIDE OPPORTUNITIES TO LEVERAGE
- 12 OTHER FUNDING FOR EFFICIENCY AND/OR FUEL SWITCHING
- 13 APPLICATIONS. REGARDING OUR GENERAL GAS PURCHASING STRATEGY,
- 14 WE'LL CONTINUE TO EXAMINE REFINEMENT TO MINIMIZE BOTH RISK AND
- 15 COST. WE HAVE MADE SIGNIFICANT AND ONGOING PROGRESS IN THIS
- 16 AREA, AS YOU HAVE HEARD ABOUT, BUT I'M CONFIDENT THAT WE CAN
- 17 CONTINUE TO FORGE CREATIVE SOLUTIONS TO THESE CHALLENGING
- 18 PROBLEMS. NEXT SLIDE PLEASE. AT THIS POINT, WE WOULD LIKE TO
- 19 OPEN IT UP FOR QUESTIONS OR GENERAL COMMENTS, IN ADDITION THIS
- 20 TIME, YOU'RE WELCOME TO CONTACT DAVE OR MYSELF USING THE E-
- 21 MAIL ADDRESSES PROVIDED ON SCREEN. THAT CONCLUDES MY
- 22 PRESENTATION.

24 DAVE BREES, CHAIR: CINDY, MAYBE IF YOU CAN SEE IF ANYBODY IS

25 RAISING THEIR HAND. OKAY.



1 CINDY CHEN, CLERK: I'M CHECKING. I DO NOT SEE ANY RAISED HANDS 2 3 NOR ANY PUBLIC COMMENTS FROM HERE. 4 5 DAVE BREES, CHAIR: OKAY. RYAN, THANK YOU VERY MUCH FOR THAT VERY DETAILED REPORT. AND AS OUR FELLOW BOARD MEMBERS CAN SEE, 6 YOU ARE REALLY IN THE SADDLE IN LOOKING AT THE AGGRESSIVE COST 7 8 MONITORING, LOOKING FOR PARTNERSHIPS, COLLABORATIONS, AND YOUR ACTIONS, YOURS, JENNY, AND THE TEAM REALLY MAKE JPA STRONG. 9 AND WE REALLY APPRECIATE THAT. SO THANK YOU VERY MUCH FOR 10 DOING THAT. IN YOUR ENTREPRENEURIAL WORK YOU HAVE BROUGHT 11 FORWARD IN THE 25K GENERATION I'M NOT AWARE OF THAT EVER 12 HAPPENING PREVIOUSLY. I ONLY HAVE TEN YEARS ON THE BOARD, NOT 13 WAY BACK, AND I HAVE NOT HEARD OF THAT BEFORE. WELL DONE. 14 15 16 BRYAN FRUS: HELLO. THIS IS BRYAN FRUS, WITH THE CITY OF SALINAS. I AM WONDERING IF THIS IS THE APPROPRIATE TIME TO 17 MAKE A COMMENT. I COULDN'T RAISE MY HAND BECAUSE I'M CALLING 18 IN VIA MOBILE. I WANT TO MAKE A COMMENT. FIRST OFF, A 19 OUESTION, IS THIS THE APPROPRIATE TIME TO TALK ABOUT A TRUE-UP 20 21 OF THE NATURAL GAS WITH THE MEMBER AGENCIES? OR WOULD THERE BE A MORE APPROPRIATE TIME TO DISCUSS THAT? 22 23 DAVE BREES, CHAIR: I THINK THAT IF IT'S SPECIFIC TO YOUR 24

AGENCY, AND YOU HAVE A SPECIFIC QUESTION ABOUT THAT I WOULD



- 1 ENCOURAGE TO TAKE IT OFFLINE SO WE CAN PULL YOUR ACCOUNT IN
- 2 FRONT OF US. RYAN CAN HANDLE THAT, OR IF IT'S A COLLECTIVE
- 3 BIGGER PICTURE NOW WOULD BE THE APPROPRIATE TIME.

- 5 BRYAN FRUS: IT'S A GLOBAL ISSUE, SPECIFICALLY A CERTAIN ONE
- 6 THEY WOULD BE HAPPY TO TAKE OFFLINE. MY COMMENT IS ABOUT THE
- 7 TRUE-UP, I THINK THE CITY OF SALINAS IS NOT ALONE SPECIFIC TO
- 8 THE COVID-19, WHERE WE'RE IN A WORLD OF HURT WHEN IT COMES TO
- 9 TAX BASED REVENUE AND IT AFFECTS OUR GENERAL FUND, AND ADDING
- 10 TO THAT, YOU KNOW, WE'RE LOOKING AT WORKING, YOU KNOW, WORKER
- 11 FURLOUGHS, ET CETERA, TO COMPENSATE FOR THAT LACK OF REVENUE,
- 12 AND SO, THIS YEAR, IN FACT, IT WAS QUITE TIMELY, IT WAS JUST A
- 13 FEW WEEKS AGO, I STARTED GETTING NOTICES FROM FINANCE AND FROM
- 14 OTHER ENTITIES WITHIN THE CITY THAT WERE NOTICING A HUGE SPIKE
- 15 IN THEIR GAS PRICES, AND I SAID WELL IT'S TIMELY BECAUSE WE'RE
- 16 GOING TO HAVE THIS ABAG MEETING AND I'M GOING TO BE REVIEWING
- 17 ALL THE YEARLY TRUE-UP ET CETERA AND WHAT I NOTICED IS, LOW
- 18 AND BEHOLD, YES, THE CITY OF SALINAS IS DUE A \$100,000 REBATE.
- 19 SO WHAT I'M WONDERING IS, IS THERE A WAY TO, YOU KNOW, I
- 20 UNDERSTAND THAT THERE IS PREDICTIONS, ET CETERA, AND
- 21 FORECASTING AND IN THE UTILITY MARKET, THAT'S NOT AN EASY
- 22 LIFT, BUT, IF THERE IS A WAY TO MAKE A MORE TIMELY ADJUSTMENT
- 23 SO THAT, YOU KNOW, THERE IS, RATHER THAN GETTING \$100,000 BACK
- 24 IN THE LAST THREE MONTHS OF A YEAR, OR OVER THE NEXT -- YOU
- 25 KNOW, I FORGET WHAT IT IS -- THE RETRIBUTION WILL HAPPEN --



BUT TO MAYBE DO SOME KIND OF CORRECTION, MID-YEAR, EVEN 1 QUARTERLY TO KIND OF LOOK AT A WAY TO TREND THE CASH FLOW 2 3 SITUATION. SO, THAT'S PRETTY MUCH MY COMMENT. 4 5 RYAN JACOBY: THANKS BRYAN, I APPRECIATE YOUR COMMENTS. SALINAS WAS ONE OF THE MEMBERS, I BELIEVE, WITH A BIGGER TRUE-UP 6 AMOUNT THIS YEAR. I UNDERSTAND THAT PARTICULARLY GIVEN THE 7 8 TIME GAP THAT IT IS CHALLENGING, BOTH ON THE PREDICTION SIDE, AS WELL AS ON THE ACCOUNTING SIDE, TO ACCOUNT FOR THAT 9 DIFFERENCE, PARTICULARLY IF IT'S A SIGNIFICANT ONE. TYPICALLY 10 WE DO GO OVER THE TRUE-UP ON A MORE DETAILED IN DEPTH BASIS AT 11 THE DECEMBER MEETING AND WE DO PLAN TO HAVE THAT AGENDA ITEM 12 OCCUR AT THE DECEMBER 9TH MEETING OF THIS YEAR. I WOULD, AS 13 THEY SAID, I WOULD ENCOURAGE US TO TAKE THIS CONVERSATION 14 OFFLINE. I WOULD BE HAPPY TO DIG INTO THE DETAILS OF THAT A 15 16 LITTLE BIT. IF YOU ARE AVAILABLE, I WOULD ALSO ENCOURAGE YOUR ATTENDANCE AT THAT MEETING AS WELL. I'LL MAKE IT A POINT TO 17 INCLUDE ON THE AGENDA, ALTERNATIVES, VIABILITY ANALYSIS, 18 ESSENTIALLY, FOR WHAT SEEMS LIKE A REQUEST TO POTENTIALLY 19 CONDUCT THE TRUE-UP ON A MORE FREQUENT BASIS, WHETHER THAT'S 20 21 QUARTERLY, BY ANNUALLY, I THINK THAT'S A REASONABLE REQUEST. 22 23 BRYAN FRUS: OKAY. ALL RIGHT. THANK YOU VERY MUCH. I THINK THAT

PRETTY MUCH ANSWERS IT. AND MAYBE OFFLINE, WE CAN HAVE A

MEETING, JUST YOU, I, AND THE FOLKS HERE AT THE CITY THAT

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24



- 1 MAYBE CAN GO OVER OUR DETAILS IN PARTICULAR. SO, ALL RIGHT.
- 2 THANK YOU VERY MUCH. AND GREAT JOB, OVERALL, THANK YOU.

3

4 RYAN JACOBY: THANKS BRYAN.

5

- 6 DAVE BREES, CHAIR: YEAH. THANK YOU BRYAN, AND JUST TO REMIND
- 7 EVERYBODY, THAT WE DO HAVE THE NEW SOFTWARE IN PLACE THAT
- 8 ALLOWS OUR FINANCE DEPARTMENTS TO HAVE THAT DIRECT INTERFACE
- 9 WITH OUR MTC STAFF, AND OUR INDIVIDUAL ACCOUNTS AS WELL AS OUR
- 10 PROGRAM MANAGERS IN TRYING TO UNDERSTAND OUR ENERGY AND ENERGY
- 11 TRACKING AND USAGE, THAT'S ANOTHER BENEFIT OF THAT NEW
- 12 SOFTWARE. OKAY. ANY OTHER QUESTIONS? OKAY. GREAT. SO WHAT I
- 13 WOULD LIKE TO DO IS TAKE US TO OUR GUEST SPEAKER. THIS IS ALSO
- 14 AN INFORMATIONAL ITEM. TODAY WE HAVE WITH US, JANICE LIN WITH
- 15 GREEN HYDROGEN COALITION, WHO IS GOING TO GIVE US A
- 16 PRESENTATION ON HER PROGRAMS. JANICE.

17

18 SPEAKER: THANK YOU. CAN YOU HEAR ME OKAY?

19

20 DAVE BREES, CHAIR: I CAN.

- 22 SPEAKER: GREAT. SUCH FOR INVITING ME HERE. THANK YOU RYAN, BY
- 23 THE WAY THAT WAS A FABULOUS PRESENTATION, OVERVIEW FOR ME. SO
- 24 I AM THE CEO OF A COMPANY CALLED STRATEGEN IN BERKLEY
- 25 CALIFORNIA. I AM A BIG ABAG FAN AND WE ARE A SERVICES FIRM



- 1 THAT SPECIALIZES IN MARKET DEVELOPMENT TO ACCELERATE CLEAN
- 2 ENERGY. AND IF YOU GO TO THE NEXT SLIDE A LITTLE BIT OF
- 3 BACKGROUND ABOUT OUR FIRM JUST SO YOU KNOW WHERE WE'RE COMING
- 4 FROM, WE'RE MOST FAMOUS FOR OUR WORK IN ENERGY STORAGE. ABOUT
- 5 11 YEARS AGO, I COFOUNDED THE CALIFORNIA ENERGY STORAGE
- 6 ALLIANCE TO RESTORE POWER IN THE SECTOR, AND ALSO WE HAVE BEEN
- 7 INVOLVED IN A LOT OF DEVELOPMENTS FOR ENERGY STORAGE. WE
- 8 COFOUNDED THE VEHICLE GRID INTEGRATION COUNCIL THAT REPRESENTS
- 9 EVS IN THE POWER SECTOR, AND VEHICLE GRID INTEGRATION AND I'M
- 10 HERE TO TALK TO YOU ABOUT THE GREEN HYDROGEN COALITION AND OUR
- 11 WORK IN ADVANCING. THE TITLE OF MY PRESENTATION IS BEYOND
- 12 POWER OPPORTUNITIES AND CHALLENGES FOR GREEN HYDROGEN. I WOULD
- 13 LIKE TO START MY PRESENTATION WITH WHY WE STARTED, AND IF YOU
- 14 GO TO THE NEXT SLIDE, I THINK THERE IS NOT A PERSON ON THIS
- 15 CALL WHO CAN'T EMPATHIZE WITH THE SITUATION, MANY THROUGHOUT
- 16 THE STATE HAVE SUFFERED FROM THE EFFECTS OF CLIMATE CHANGE IN
- 17 THE WORDS OF ANTONIO GUTIERREZ, THE UN SECRETARY, THIS IS A
- 18 DEFINING MOMENT. THERE IS GREAT WAYS TO FIND WAYS TO WORK
- 19 FASTER TOGETHER. THE GOOD NEWS IS WE DON'T HAVE TO FEEL SUPER
- 20 DEPRESSED ALTHOUGH IT FEELS LIKE WE LIVING IN A BLADE RUNNER
- 21 MOVIE EVEN HERE IN BERKELEY, BUT THE GOOD NEWS IS THERE ARE
- 22 SOLUTIONS WE HAVE AT OUR FINGER TIPS TODAY THAT CAN BE
- 23 DEPLOYED TO UPPER GAIN CLIMATE CHANGE AND HOPEFULLY PUT US ON
- 24 A DIFFERENT TRAJECTORY. NEXT SLIDE PLEASE. FOR THE LAST TEN
- 25 YEARS I HAVE BEEN TALKING ABOUT HOW ENERGY STORAGE IS A GAME



- 1 CHANGER, AND I STILL BELIEVE ENERGY STORAGE IS A GAME CHANGER.
- 2 WE NEED ALL KINDS OF STORAGE IN OUR POWER SECTOR STORAGE FOR
- 3 OUR TRANSPORTATION FLEET. BUT I'M HERE TO TALK TO YOU ABOUT
- 4 GREEN HYDROGEN AS A SUPER GAME CHANGER. AND I'LL TELL YOU MY
- 5 STORY. BRIEFLY, WHEN I STARTED ABOUT TWO YEARS AGO, RIGHT
- 6 ABOUT THAT SAME TIME WAS THE FIRST TIME I HEARD ABOUT
- 7 HYDROGEN, ACTUALLY A SCIENTIST FROM GERMANY, A PROFESSOR
- 8 MICHAEL, VISITED ME HERE IN BERKELEY TO TELL ME ABOUT HOW
- 9 GERMANY WAS PLANNING TO DECARBONIZE THEIR GAS GRID. THEY WERE
- 10 GOING TO USE ENERGY AND MUNICIPAL WASTE AND CONVERT IT TO
- 11 GREEN HYDROGEN INJECT IT INTO THE GAS SYSTEM AND FROM THE GAS
- 12 SYSTEM USE THESE DECARBONIZED MOLECULES TO DECARBONIZE OTHER
- 13 SECTORS THIS WAS IN 2010. AFTER HE LEFT MY OFFICE, I SAID
- 14 THAT'S ABOUT THE KOOKIEST THING I HAVE EVER HEARD. AND I HAVE
- 15 TO GIVE HIM CREDIT BECAUSE HERE WE ARE, THAT WAS TEN YEARS
- 16 AGO, AND EVERYTHING THE PROFESSOR FORECASTED IS ACTUALLY
- 17 COMING TRUE TODAY. IN OTHER PLACES AROUND THE WORLD MAYBE LESS
- 18 SO IN NORTH AMERICA, BUT I AM HERE TO TELL BUT SOME EXCITING
- 19 PROJECTS THAT ARE HAPPENING HERE. FOR DATA POINT, GERMANY JUST
- 20 ANNOUNCED AN AMBITIOUS PLAN TO DO JUST THAT DECARBONIZE GAS
- 21 SECTOR AND THE GOAL IS TO GIVE NATURAL GAS THE BOOT. THERE IS
- 22 A LOT MORE BACK STORY ABOUT THAT. BUT LET ME LEAVE YOU WITH
- 23 THIS THOUGHT. YOU KNOW, GREEN HYDROGEN IS THIS AMAZING LITTLE
- 24 MOLECULE. I LOVE THIS PICTURE BECAUSE IT ACTUALLY BURNS SO
- 25 CLEANLY, YOU CAN'T EVEN SEE IT, BUT IT'S BEING USED TO SEND



- 1 THIS SPACE SHUTTLE TO OUTER SPACE, AND THEN THE NEXT SLIDE,
- 2 HERE IS ANOTHER THOUGHT THAT I'LL LEAVE WITH YOU, IS THAT
- 3 NATURE HAS BEEN MAKING FUEL FROM WATER AND SUN SINCE PLANTS
- 4 WERE INVENTED, AND GREEN HYDROGEN, WE CAN DO THAT TOO WITH
- 5 WATER AND RENEWABLE ELECTRICITY, THERE IS OTHER WAYS TO DO IT,
- 6 WE CAN ALSO MAKE FUEL THAT IS EXTREMELY FLEXIBLE AND HAS
- 7 MULTIPLE USES. SO LET ME QUICKLY, IN THE INTEREST OF TIME,
- 8 BECAUSE I THINK RYAN AND I HAVE A TOTAL OF MAYBE TEN MINUTES
- 9 LEFT, ROUGHLY. YOU CAN HELP ME OUT?

10

- 11 RYAN JACOBY: YES. DEPENDING ON FOLKS'S AVAILABILITY, THE
- 12 MEETING RUNS UNTIL 1:00, SO IF YOU WANT TO DO ANOTHER TEN
- 13 MINUTES OF PRESENTATION AND THEN Q&A, WE'RE OKAY WITH THAT ON
- 14 OUR SIDE.

- 16 SPEAKER: I'LL GO FASTER. NEXT SLIDE PLEASE. SO, A LITTLE BIT
- 17 MORE ABOUT THE GREEN HYDROGEN COALITION, AS I MENTIONED IT'S A
- 18 501 C THREE AND OUR MISSION IS TO FACILITATE POLICIES AND
- 19 PRACTICE TO ADVANCE THE PRODUCTION AND USE OF GREEN HYDROGEN
- 20 IN ALL SECTORS WHERE IT WILL ACCELERATE A CARBON FREE FUTURE.
- 21 IT'S DIFFERENT IN THAT ALL EFFORTS TO USE AND PRODUCE GREEN
- 22 HYDROGEN ALREADY EXIST TODAY, THE KEY IS HOW DO WE SCALE THESE
- 23 SOLUTIONS TO GET THE COST DOWN AND THE SOLUTION TO THAT IS TO
- 24 FIND WAYS TO AGGREGATE DEMAND ACROSS SECTORS BECAUSE WE NEED
- 25 TO SIMULTANEOUSLY SCALE SUPPLY AND DEMAND. DEFINING WHAT WE



- 1 MEAN BY GREEN HYDROGEN WE MEAN ALL PATHWAYS THAT COULD MAKE IT
- 2 FROM RENEWABLE SOURCE SOLAR WIND, HYDRO, SPLITTING WATER,
- 3 HYDROGEN AND OXYGEN, YOU ALSO PRODUCE GREEN HYDROGEN BY
- 4 CONVERTING BIO MASS OR BIO METHANE EITHER THROUGH REFORMING
- 5 BIO GAS, SMR, STEAM METHANE, AND LOTS OF PATHWAYS WHAT'S
- 6 INTERESTING FOR MUNICIPAL GOVERNMENTS IS WHAT IS TODAY A
- 7 PROBLEM IN MUNICIPAL WAYS IS A VALUABLE INPUT TO PROCESSES
- 8 THAT CAN MAKE GREEN HYDROGEN. SO WE CAN TALK MORE ABOUT THAT
- 9 IF YOU'RE INTERESTED N LET'S KEEP GOING. JUST TO SUMMARIZE WHY
- 10 I THINK GREEN HYDROGEN IS A GAME CHANGER, THERE IS A NUMBER OF
- 11 REASONS AND THIS IS SHARING MY JOURNEY OF HOW I CAME TO THIS
- 12 CONCLUSION. ONE IT'S COMMERCIALLY VIABLE, THE EQUIPMENT TO
- 13 MAKE THIS HAS BEEN AROUND FOR A LONG TIME. WHAT'S REALLY
- 14 EXCITE SUGGEST -- EXCITING. A LOT OF OUR ENERGY CAN BE
- 15 REPURPOSED, AND I'LL TALK ABOUT MY PLANT IN A MINUTE, THAT'S
- 16 GETTING PURPOSE TO GREEN HYDROGEN ELECTRIC TURBINE. YOU CAN
- 17 ALSO REPURPOSE PIPELINES TOO. THIS IS A MATURE COMMODITY,
- 18 HYDROGEN IN GENERAL HAS BEEN, IT'S TRADED ALL OVER THE WORLD.
- 19 IN THE NEXT SLIDE I'LL SHOW YOU THE VOLUMES USED FOR MANY
- 20 INDUSTRIAL PROCESSES. SO, THE STORAGE, THE TRANSPORTATION, THE
- 21 SAFETY REGIMES, IS ALREADY IN EXISTENCE. AND WHAT'S ALSO
- 22 EXCITE BEING -- EXCITING ABOUT THIS NEW MOLECULE IS NOT ONLY
- 23 CAN IT DISPLACES THE GRAY HYDROGEN USES WHICH ARE MOSTLY
- 24 INDUSTRIAL USES BUT THE GREEN HYDROGEN MOLECULE CAN REPLACE
- 25 FOSSIL FUELS FOR A WHOLE BUNCH OF APPLICATIONS AND THE ONE



- 1 THAT MOST FOLKS ARE FAMILIAR WITH IS DISPLACING GASOLINE,
- 2 AMAZING DECARBONIZATION POTENTIAL, AND THE FINAL TICKET THAT
- 3 GETS US TO 100 PERCENT RENEWABLE ENERGY IN THE POWER SECTOR.
- 4 NEXT SLIDE. THIS IS A CHART FROM THE INDEPENDENT -- ONE MORE -
- 5 THIS IS A CHART FROM THE INTERNATIONAL ENERGY AGENCY AND IT
- 6 SHOWS HISTORICALLY THE SOURCES OF HYDROGEN TODAY. THIS IS ON A
- 7 GLOBAL BASIS YOU CAN SEE MOST OF IT IS MADE FROM NATURAL GAS
- 8 AND COAL, AND MOST OF THE HYDROGEN MADE TODAY GOES INTO OIL
- 9 REFINING AND AMMONIA. 80 PERCENT OF THE AMMONIA THAT'S MADE IS
- 10 A PRECURSOR TO MAKING FERTILIZER CALIFORNIA IS A BIG
- 11 AGRICULTURE STATE AND ALL OF THE PRODUCE IS MADE FROM FOSSIL
- 12 FUELS WE CAN FIX THAT. WHAT'S INTERESTING, THERE IS A WHOLE
- 13 BUNCH OF INDUSTRIAL APPLICATIONS, BUT AGAIN WHAT'S REALLY
- 14 EXCITING ABOUT HYDROGEN IS THAT OVER TIME, WE'RE GOING TO SEE
- 15 THE USES EXPAND AND GROW INTO TRANSPORTATION WE CAN USE
- 16 HYDROGEN AS AN ALTERNATIVE FUEL FOR SHIPPING EVEN AVIATION. SO
- 17 THESE ARE THE REALLY HARD TO DECARBONIZE SECTORS WE DIDN'T
- 18 THINK WOULD BE DECARBONIZABLE. GREEN INDUSTRY IS BIG TODAY
- 19 ABOUT 70 MILLION METRIC TONS PRODUCED, AS WASTE BYPRODUCT FROM
- 20 INDUSTRIAL PROCESSES AND IF YOU GO TO THE NEXT SLIDE, IT YOU
- 21 ADDED UP ALL THE EMISSIONS, CARBON EMISSIONS FROM GLOBAL
- 22 HYDROGEN PRODUCTION TODAY AND TO TREAT IT AS IF IT WERE A
- 23 COMPANY TODAY, IT WOULD RANK ABOVE GERMANY. SO EVEN TO JUST
- 24 DISPLACE GREEN HYDROGEN THAT'S A WORTHY AMBITION RIGHT THERE.
- 25 NEXT SLIDE. THE REALLY EXCITING PART AND WHAT'S CHANGED FROM



- 1 NOW AND TEN YEARS AGO WHEN FIRST SPOKE TO YOU, PROFESSOR
- 2 STARNER, IT'S A LOT CHEAPER PRIMARILY BECAUSE THE FACTOR
- 3 INPUTS NEEDED TO MAKE HYDROGEN HAVE GOTTEN WAY CHEAP. TODAY
- 4 WIND AND SOLAR IN MANY COUNTRIES AROUND THE WORLD ARE COST
- 5 EFFECTIVE AND THE KILLER IN SOME PLACES WE'RE CURTAILING
- 6 RENEWABLE ENERGY WE HAVE ABUNDANCE HERE IN CALIFORNIA WE ARE
- 7 BLASTED WITH RENEWABLE ENERGY AND THIS IS A COST FORECAST OF
- 8 THE LEVELIZED COST FOR HYDROGEN IN DOLLARS PER KILL GRAM YOU
- 9 CAN SEE THE FORECAST AND THIS IS FROM THE INTERNATIONAL
- 10 RENEWABLE ENERGY AGENCY WITHIN THE NEXT FIVE YEARS IT WILL BE
- 11 COST COMPETITIVE WITH HYDROGEN MADE WITH FOSSIL FUELS WITH
- 12 CARBON SEQUESTRATION AND IN THE NEXT YEARS, COMPARABLE COST,
- 13 ONCE YOU GET INTO THAT WITHIN THE PLANNING HORIZON OF
- 14 INFRASTRUCTURE, THINK ABOUT IT, YOU HAVE AN INPUT, A
- 15 SUBSTITUTABLE GREEN GAS OR NATURAL GAS THAT HAS NO VOLATILITY
- 16 BECAUSE THE FACTOR INPUTS ARE RENEWABLE. IT'S ON TRAJECTORY
- 17 FOR LOWEST COST. NEXT SLIDE. REMEMBER I MENTIONED THAT WE CAN
- 18 REPURPOSE EXISTING INFRASTRUCTURE. THIS IS MY FAVORITE PLAN,
- 19 IT'S CALLED THE INTERMOUNTAIN POWER PROJECT LOCATED IN CENTRAL
- 20 UTAH IT'S A LARGE COAL PLANT IN 2025 IT IS THE LAST COAL PLANT
- 21 THAT SERVES CALIFORNIA THAT PRIMARY OFFTAKER IS LOS ANGELES
- 22 DEPARTMENT OF WATER AND POWER, AND ABOUT THREE MONTHS AGO, A
- 23 CONTRACT WAS JUST AWARDED TO MITSUBISHI TO REPLACE THE COAL
- 24 BOILERS. ON DAY ONE WHEN THIS TURBINE IS COMMISSIONED, IT WILL
- 25 COMBUST A BLEND OF 70 PERCENT NATURAL GAS 30 PERCENT HYDROGEN



- 1 FROM WIND AND SOLAR TAKING THAT PERCENTAGE UP TO 100 PERCENT
- 2 BY 2045 COMPLETELY ELIMINATING THE CARBON EMISSIONS FROM THIS
- 3 PLANT. WHAT'S SUPER COOL ABOUT THIS PROJECT, THIS PLAN EXISTS
- 4 IN THE MIDDLE OF NOWHERE IN THE HIGH DESERT. THE ENTIRE
- 5 WORKFORCE CURRENTLY EMPLOYED OPERATING AND MAINTAINING THIS
- 6 COAL PLAN IS GETTING RETRAINED INTO A NEW AND INTERESTING AND
- 7 EXCITING CAREER FUTURE. NEXT SLIDE. ANOTHER EXCITING THING
- 8 ABOUT GREEN HYDROGEN IS YOU CAN KIND OF MAKE IT ANYWHERE YOU
- 9 HAVE A POWER SECTOR. YOU CAN CITE IT. THE ABILITY TO TURN IT
- 10 BACK INTO ELECTRICITY, YOU CAN DO IT AT A GIANT COAL PLANT BUT
- 11 ALSO IN A MODULAR DISTRIBUTED WAY USING FUEL CELLS AND ON MY
- 12 JOURNEY I DISCOVERED THERE ARE QUITE A FEW FUEL CELLS
- 13 COMMERCIALLY AVAILABLE TODAY THAT ARE OPTIMIZED FOR EMERGENCY
- 14 BACKUP. MEANING WE COULD BE USING FALL CELLS WITH GREEN
- 15 HYDROGEN AS BACK UP EMERGENCY INSTEAD OF DIESEL IN THE PSPS
- 16 EVENT THIS IS BACKING UP THE SIGNAL. THIS IS USE CASE THAT GOT
- 17 ME GOING ON GREEN HYDROGEN THIS IS A SNAPSHOT OF WHAT
- 18 CALIFORNIA NET LOAD WILL LOOK LIKE, THE SURPLUSES AND DEFICITS
- 19 ON THE COURSE OF A YEAR, WHEN WE ACHIEVE 100 PERCENT
- 20 RENEWABLES. YOU CAN SEE, WE DID THIS QUICK ANALYSIS, AND
- 21 PLOTTED IT OVER THE COURSE OF THE YEAR AND YOU CAN SEE THERE
- 22 ARE DEFINITELY MULTIPLE DAYS WHERE WE WILL NEED STORAGE AND
- 23 SEASONS, AND IF YOU GO ON TO THE NEXT SLIDE, REMEMBER, I
- 24 STARTED AT THE STORAGE, THERE ARE SO MANY DIFFERENT TYPES OF
- 25 STORAGE TO ADDRESS THAT PROBLEM. WE NEED SHORT DURATION,



1	DAILY, WEEKLY AND SEASONAL STORAGE AND THE ONLY SOLUTION
2	COMMERCIALLY AVAILABLE TODAY TO ACHIEVE THAT MONTHLY AND
3	SEASONAL STORAGE IS HYDROGEN. SO YOU CAN THINK OF GREEN
4	HYDROGEN AS A CONVENIENT STORAGE MECHANISM TO STORE LOW COST
5	WIND AND SOLAR. NEXT SLIDE. THE FINAL REASON WHY I MENTIONED
6	AND GOT SO EXCITED ABOUT GREEN HYDROGEN IS EMISSIONS DRIVEN
7	PERSON AND EMISSIONS DRIVEN FIRM, WHEN YOU SEE THE VERSATILE
8	ABILITY OF THIS MOLECULE IT CAN GO INTO SO MANY SECTORS AND IF
9	YOU CAN MAKE IT FROM RENEWABLE SOURCE IT IS HAS THE POTENTIAL
10	TO DECARBONIZE A BUNCH OF SECTORS THIS IS ACHIEVABLE NOT ONLY
11	IN OUR LIFETIME BUT WITHIN THE NEXT SINGLE DIGIT YEARS. I CAN
12	TELL YOU WITHIN OUR PROGRAM WE HAVE COMMERCIALIZING AIR TRAVEL
13	20 PASSENGER PLANES FOR SHORT DURATION FLIGHTS WILL BE GREEN
14	HYDROGEN POWERED AND VERY QUIET. HERE IS AN INNER MOUNTAIN
15	PROJECTS. I'M GOING TO GO QUICKER. THIS PARTICULAR POWER PLAN
16	IS BLAST WITH, IT'S SURROUNDED BY A LOT OF RENEWABLE ENERGY.
17	IT'S GOT A GREAT HIGH VOLTAGE INTERCONNECT WITH NOT ONLY THE
18	NORTHWEST BUT ALSO INTO LOS ANGELES, IT HAS LAND AND WATER
19	BECAUSE IT WAS A COAL PLANT AND IT HAPPENS TO SIT ON TOP OF
20	THE LARGEST SALT FORMATION IN THE WESTERN UNITED STATES. SALT
21	DAMS HAVE BEEN PROVEN FOR DECADES TO STORE LOTS OF THINGS,
22	PROPANE, COMPRESSED AIR, ALSO USED TO STORE HYDROGEN, TWO SALT
23	DOMESTIC IN OPERATIONS IN TEXAS TODAY AND THE MOST IMPORTANT
24	ONE ARE THE PEOPLE, VERY SKILLED WORKFORCE. CONTINUING ON, I
25	KNOW RYAN HAD INCLUDED SOME POLICY MATTERS. SO, YOU KNOW, YOUR



- 1 OUESTION MAY BE NOW, WELL, IF GREEN HYDROGEN IS SO GREAT.
- 2 [LAUGHTER] WHY ISN'T THIS USED MORE OFTEN? AND AS OFTEN IS THE
- 3 CASE WITH NEW TECHNOLOGIES, THE MARKET ISN'T QUITE DESIGNED TO
- 4 DEAL WITH A FLEXIBLE MOLECULE THAT CAN FIT IN MULTIPLE SECTORS
- 5 AND ISN'T QUITE DEFINED AS RENEWABLES, AND SO WE NEED A NEW
- 6 PARADIGM. IT'S NOT UNLIKE THE NEW PARADIGM THAT WAS NEEDED TO
- 7 INTRODUCE ENERGY STORAGE BY DIRECTIONAL RESOURCE. SO JUST TO
- 8 WRAP UP HERE, I'LL SUMMARIZE SOME OF THE KEY BARRIERS. ONE,
- 9 PROJECTS TO DATE ARE TOO SMALL TO DRIVE DOWN PRODUCTION COST.
- 10 THAT IS CHANGING IN THE APPENDIX OF THIS DOCUMENT THERE IS A
- 11 NUMBER OF PROJECTS LISTED THAT WILL DEFINITELY BE A
- 12 BREAKTHROUGH HERE. FOR EXAMPLE, ELECTROLYSIS FACTORIES TODAY
- 13 DON'T RUN THREE SHIFTS 24/7. I WOULD SAY WITHIN A COUPLE OF
- 14 YEARS THAT'S GOING TO CHANGE. THE IPP PROJECT IS PRETTY LARGE
- 15 AND THERE IS MANY THAT HAVE BEEN ANNOUNCED AROUND THE WORLD
- 16 THE OTHER WAY TO ACCELERATE THIS IS BY AGGREGATING DEMAND AND
- 17 I WOULD SAY MUNICIPAL GOVERNMENTS ARE IN GREAT POSITION TO
- 18 AGGREGATE DEMAND IN A PARTICULAR PLACE LOOKING AT APPLICATIONS
- 19 SUCH AS YOU FUELING STATIONS. PROVIDING EMERGENCY BACK UP,
- 20 PERHAPS PARTNERING WITH AN ELECTRIC CKA TO DO PROCUREMENT
- 21 AND/OR MAKING THE HYDROGEN LOCALLY FOR A RESOURCE ADEQUACY OR
- 22 CAPACITY AS AN ALTERNATIVE TO NATURAL GAS. THERE IS A HIGH
- 23 COST OF HYDROGEN TRANSPORT AND STORAGE. TODAY, YOU KNOW,
- 24 OUTSIDE OF THE GULF COAST WHERE WE HAVE UNDERGROUND SALT
- 25 CAVERNS AND HYDROGEN PIPELINES, THE PRIMARY WAY THAT HYDROGENS



- 1 MOVED AROUND FUELING STATIONS TODAY IS COMPRESSED ON TRUCKS,
- 2 ROAD TRANSPORTS MUCH MORE EXPENSIVE THAN IF WE HAD PIPELINES,
- 3 THE PUBLIC UTILITIES COMMISSION IS CONSIDERING AND HOPEFULLY
- 4 SOON WILL COME UP WITH AN INJECTION STANDARD SO WE CAN INJECT
- 5 GREEN AMOUNT OF GAS INTO THE PIPELINE. ANOTHER POSSIBILITY IS
- 6 WHERE WE HAVE SUFFICIENT AGGREGATED DEMAND LARGE APPLICATIONS
- 7 WHY NOT BUILD A HYDROGEN PIPELINE 100 PERCENT HYDROGEN
- 8 PIPELINE THERE ARE ALSO LOTS OF PLACES ON THE STORAGE FRONT,
- 9 ABOVE GROUND STORAGE UNDERGROUND STORAGE IF YOU USE DEPLETED
- 10 AND RETIRED NATURAL GAS STORAGE CAVERNS WE HAVE NEVER STUDIED
- 11 ITS POTENTIAL AS A STATE. ENCOURAGING CEC TO DO THAT STUDY.
- 12 ANOTHER BARRIER IS GREEN HYDROGEN IS A MODEL IN OUR RP, THAT
- 13 NEEDS TO CHANGER, I WOULD SAY LADWP IS LEADING THE WAY WITH
- 14 THEIR LA 100 STUDY. AND FINALLY WE DON'T HAVE TARIFFS THAT ARE
- 15 DESIGNED TO INTERFACE BETWEEN THE ELECTRIC AND THE GAS SECTOR.
- 16 ANYWAY, I WOULD WRAP UP, AND I REALLY WOULD LIKE TO HEAR FROM
- 17 YOU ALL OF YOUR QUESTIONS. BUT LOTS OF WAYS TO PARTICIPATE.
- 18 WE'RE A 501 C THREE, WE WOULD WELCOME MORE COLLABORATION WITH
- 19 ABAG AND ON SLIDE 22, IF YOU KEEP GOING, I WANT TO INVITE
- 20 EVERYBODY TO OUR FALL EVENT VIRTUAL EVENT NOVEMBER 17TH
- 21 THROUGH 18th CALLED GREEN HYDROGEN VISIONS FOR THE WEST WE'RE
- 22 JOINTLY HOSTING THIS WITH NASO NATIONAL ASSOCIATION OF STATE
- 23 OFFICIALS AND THE WESTERN STATES ENERGY BOARD AND WE'RE GOING
- 24 TO BE MAKING A BIG ANNOUNCEMENT BUT IT'S A GREAT WAY TO LEARN
- 25 ABOUT GREEN HYDROGEN AND YOU WILL MEET LOTS OF FOLKS. WITH



- 1 THAT I WILL JUST CLOSE WITH ONE OF MY FAVORITE QUOTES, NEXT
- 2 SLIDE, FROM MARGARET MEAD WHO IS A FAMOUS SOCIAL
- 3 ANTHROPOLOGIST WHO SAYS THAT, "NEVER DOUBT THAT A SMALL GROUP
- 4 OF THOUGHTFUL COMMITTED CITIZENS CAN CHANGE THE WORLD, INDEED
- 5 IT'S THE ONLY THING THAT EVER HAS." THANK YOU.

6

- 7 DAVE BREES, CHAIR: GREAT. THANKS JANICE. DO FOLKS HAVE
- 8 QUESTIONS OR COMMENTS FOR JANICE? CHRIS?

9

- 10 CHRIS SCHROEDER: HOW LONG DO YOU THINK, ROUGHLY, IT WOULD BE
- 11 BEFORE WE CAN ACTUALLY SEE NATURAL GAS STARTING TO BE REPLACED
- 12 ON A REGULAR BASIS BY GREEN HYDROGEN? I MEAN, FOR EXAMPLE,
- 13 HERE IN CONTRA COSTA COUNTY, THEY HAVE ONLY JUST STARTED
- 14 CONVERTING TO ELECTRIC, TO DO AWAY WITH NATURAL GAS. HOW LONG
- 15 DO YOU THINK IT WILL TAKE TO GET TO HYDROGEN?

- 17 SPEAKER: YEAH, YOU KNOW, IT'S GOING TO VARY BY APPLICATION.
- 18 AND IN THE UK, THEY ARE EXPLORING BRINGING HYDROGEN, YOU KNOW,
- 19 SHORT OF THIS, JUST COMPLETELY CONVERTING THEIR GAS SYSTEM
- 20 DOWN TO THE RESIDENTIAL LEVEL, TO HYDROGEN. AND IN THE UK
- 21 ORIGINALLY THEY STARTED THE TOWN GAS WHICH HAD HYDROGEN TO
- 22 START WITH. MY PREDICTION IS THAT A GREEN HYDROGEN WILL
- 23 DISPLACES NATURAL GAS STARTING WITH CERTAIN VERY LARGE
- 24 INDUSTRIAL APPLICATIONS. THERE ARE CERTAIN APPLICATIONS THAT
- 25 ARE A NO-BRAINER, FOR EXAMPLE, ONE APPLICATION THAT'S DOING



1	EXTREMELY WELL IN THE U.S., AND WE'RE GOING TO HAVE A CASE
2	STUDY ON THIS IN OUR FALL EVENT IS USING HYDROGEN FOR INDOOR
3	FORKLIFT IN ALLOW OF BATTERY ELECTRIC FORKLIFTS OR PROPANE OR
4	NATURAL GAS FORKLIFTS IT'S AN INDOOR ENVIRONMENT, THERE ARE NO
5	EMISSIONS IT'S VERY QUIET AND UNLIKE A BATTERY FORKLIFT, YOU
6	CAN REFUEL IT INSTANTLY YOU DON'T HAVE DOWNTIME SO THAT
7	PROPOSITION IS A NO-BRAINER. OTHER APPLICATIONS, YOU ARE
8	PROBABLY AWARE OF GREEN HYDROGEN AS AN ALTERNATIVE FUEL FOR
9	CARS AND TRUCKS. WE ARE BUILDING OUT OUR FUELING STATIONS AS
10	ARE OTHER STATES. AND FOR NATURAL GAS, I THINK THE BIGGEST
11	APPLICATION IS GOING TO BE IN THE POWER SECTOR INITIALLY, SO
12	PROJECTS LIKE THE CONVERSION OF INTERMOUNTAIN POWER PROJECT
13	WHERE WE'RE CONVERTING FROM COAL TO GAS, TO HYDROGEN, THAT HAS
14	A VERY LARGE USAGE, LIKE, REALLY LARGE. IT MAY NOT BE THE
15	HIGHEST VALUE AT THE MARGIN, BUT IT IS AN APPLICATION THAT
16	HELPS ACHIEVE CERTAIN RENEWABLE TARGETS IN THE POWER SECTOR
17	AND MAINTAIN RELIABLE. AND, FRANKLY, THERE IS NO STORAGE
18	SOLUTION, COMMERCIALLY AVAILABLE, THAT CAN MEET THAT NEED
19	TODAY.
20	
21	CHRIS SCHROEDER: THANK YOU.
22	

CINDY CHEN, CLERK: I ALSO SEE A RAISED HAND IN BRYAN FRUS, DO 23

24 YOU HAVE A QUESTION? MAYBE IT'S FROM THE PREVIOUS QUESTION.



RYAN JACOBY: BRYAN, I THINK YOU'RE MUTED. OKAY. 1 2 3 BRYAN FRUS: ALL RIGHT. HOW ABOUT NOW? 4 5 CHRIS SCHROEDER: GOOD. WE CAN HEAR YOU. 6 BRYAN FRUS: GOOD. FOR SOME REASON I COULDN'T UNMUTE ON THE 7 8 PHONE MAYBE BECAUSE I'M ON THE COMMUTER I'M NOT SURE. I HAVE A FEW OUESTIONS. BRYAN FRUS CITY OF SALINAS, AS YOU ARE PROBABLY 9 10 AWARE WE'RE VERY MUCH AN AGRICULTURAL COMMUNITY, AND SO, ONE QUESTION IS, HOW SCALEABLE IS THIS? AND THEN WHAT KIND OF 11 PRIVATE INVESTMENT WOULD THERE BE FOR A HYDROLYSIS KIND OF 12 PLANT IF YOU WILL IF WE COULD TAKE IN SOMETHING LIKE AG WASTE 13 AND PROCESS IT. WHAT'S PROCESS IF IT'S GOING TO BE DISTRIBUTED 14 15 ARE WE GOING TO HAVE SMALL PROCESSING FACILITIES BECAUSE WE 16 DON'T HAVE THE PIPELINE AND WAITING FOR THE INFRASTRUCTURE ON THAT LEVEL IS PROBABLY A BIGGER LIFT BUT TO DO SOMETHING EIGHT 17 LOCAL LEVEL IT'S LIKE OKAY WE'RE GOING TO PROCESS HYDROGEN AND 18 IT'S GOING TO BE COST EFFECTIVE FOR US AND THEN DUMP IT INTO 19 CITY VEHICLES OR GO BACK INTO THE AG INDUSTRY AND RUN THE 20 21 GARBAGE TRUCKS OR SOMETHING LIKE THAT. THAT'S MY QUESTION. 22 SPEAKER: SO ANY APPLICATION, YOU HAVE TO REMEMBER, THERE IS A 23 COST SIDE AND A BENEFIT SIDE OF THE EQUATION. AND ON THE COST 24 25 SIDE, THE LARGER YOU CAN BUILD THE PROJECT, THE LOWER THE



- 1 COST, BECAUSE YOU NEED TO ACHIEVE A CERTAIN SCALE. AND SO YOU
- 2 CAN SCALE A PROJECT SEVERAL WAYS. I THINK THE SMALLEST
- 3 INCREMENTS OF THE THERMAL CONVERSION, LIKE CONVERSION OF AG
- 4 WASTE IS PROBABLY 30 TO 50 MEGAWATTS, THAT PROBABLY GIVES YOU
- 5 A ROUGH, SIZE WISE, ELECTROLYSIS WHERE YOU MAKE THE HYDROGEN
- 6 FROM RENEWABLE ELECTRICITY, THAT CAN HAPPEN IN ALMOST ANY
- 7 SCALE. BUT BIGGER IS GOING TO BE CHEAPER. YOU KNOW, I'M TOLD
- 8 THAT THE MODULES THAT THEY'RE CONCEIVING FOR IPP, BECAUSE THAT
- 9 PROJECT IS SO LARGE, 50 TO 100 MEGAWATT CHUNKS AND BY DOING
- 10 THEM LARGER YOU'RE ABLE TO GET THE COST DOWN. BUT THE OTHER
- 11 SIDE OF IT, REMEMBER THERE'S A BENEFIT SIDE OF THE EQUATION,
- 12 AND I AGREE IF THERE IS OPPORTUNITY IN ONE SPOT TO IDENTIFY
- 13 AGGREGATED DEMAND, AND SCALE THE PRODUCTION, THAT'S A REALLY
- 14 GREAT SOLUTION, BECAUSE THEN YOU DON'T NEED A PIPELINE. YOU
- 15 STILL HAVE TO FIGURE OUT SOME INTERMEDIARY SOLUTION, YOU HAVE
- 16 ABOVE GROUND YOU MAY HAVE UNDERGROUND AS WELL IF THERE IS A
- 17 STUDY, IF THERE'S A PREEXISTING OIL FEED OR RIGHT GAS ROC
- 18 FORMATIONS. AND WHAT I'M TRULY FASCINATED BY IN A PLACE LIKE
- 19 SALINAS IS ON THE BENEFIT SIDE OF THE EQUATION, YES CERTAINLY
- 20 THERE IS FUELING STATIONS BUT THAT APPLICATION IS SMALL, BUT
- 21 WHAT IF WE WERE TO USE THE AG WASTE FOR YOUR ABUNDANT
- 22 RENEWABLES AND ELECTROLYSIS, THERE ARE SEVERAL WAYS TO DO IT,
- 23 MAKE THE HYDROGEN AND START PRODUCING THE AMMONIA AND
- 24 FERTILIZER LOCALLY. NOBODY HAS DONE THAT ANALYSIS AND IS THERE
- 25 A WAY TO PRODUCE LOCAL JOBS, YOU'RE ADDING AN INDUSTRY,



VERTICALLY INTEGRATING, IS THERE A WAY IF WE PRODUCE WITH 1 GREEN FERTILIZER TO HAVE A PREMIUM PRODUCT, WE HAVE ORGANIC 2 3 PRODUCE AND THEN ORGANIC AND DECARBONIZED PRODUCE. THERE IS A LOT OF SOLUTIONS SO THE TIMING OF WHEN IT'S COST EFFECTIVE 4 5 DEPENDS ON ALL OF THOSE FACTORS. I THINK THERE ARE SOME INTERESTING THINGS THAT CAN BE DONE IN AG COMMUNITIES. 6 7 8 BRYAN FRUS: HENCE MY QUESTION ON SCALEABILITY HOW FEASIBILITY IS IT ON A HIGH LEVEL. I UNDERSTAND YOU CAN EXTRACT METHANE 9 FROM SEWAGE BUT IS THERE A HYDROGEN COMPONENT THAT'S AT ALL 10 11 SIGNIFICANT? 12 SPEAKER: YES. IN FACT, YOU CAN TAKE METHANE FROM SEWAGE WHICH 13 I THINK IS CONSIDERED A RENEWABLE GAS BECAUSE IT'S HARVESTED, 14 AND THE PROCESS IS CALLED STEAM METHANE REFORMATION. IT'S VERY 15 16 SIMILAR TO HOW THEY PRODUCE HYDROGEN FROM NATURAL GAS TODAY, SMR, AND IN FACT, I THINK IT'S EITHER MINDY OR AIR PRODUCTS 17 HAS QUITE A FACILITY, WHICH IS THE SOURCE FOR GREEN FUELING 18 19 STATION APPLICATIONS TODAY. 20 BRYAN FRUS: SO ARE YOU SAYING THERE'S A HYDROGEN COMPONENT 21 22 THAT'S SIGNIFICANT IN SEWAGE?



- 1 SPEAKER: YES. WELL, YOU WOULD TAKE THE BIO GAS THAT'S COMING
- 2 OFF THE SEWAGE AND YOU WOULD HAVE TO GO THROUGH MORE
- 3 PROCESSING STEP. APPARENTLY --

4

- 5 BRYAN FRUS: OKAY. SO WE ALREADY HAVE A -- SO MAYBE I CAN GO
- 6 OFFLINE AND TALK TO YOU MORE ABOUT IT. BECAUSE I WOULD LIKE TO
- 7 EXPLORE SOME DIFFERENT OPTIONS. LIKE I SAID, YOU KNOW, SALINAS
- 8 PRODUCES AN ENORMOUS AMOUNT OF AG WASTE, AND WE'RE NOT SO MUCH
- 9 -- I WOULDN'T SAY THAT SALINAS PUTS FORWARD THE WHOLE NOTION
- 10 OF ORGANIC FARMING FIRST, BUT WE DO HAVE ORGANIC PRODUCERS IN
- 11 THE AREA. YOU KNOW, WHEN YOU TALK ABOUT MONEY IN AG, IF YOU
- 12 CAN SHAVE THE TIGHT MARGINS THAT THEY'RE ON, IF YOU CAN TALK
- 13 MONEY WITH THEM, THEY LISTEN. SO THANK YOU. GREAT
- 14 PRESENTATION.

15

- 16 SPEAKER: I WOULD LOVE TO TALK TO YOU SEPARATELY. WE ACTUALLY
- 17 HAVE BEEN WORKING WITH A TEAM OF STUDENTS FROM CAL TO INFORM
- 18 THE STABILITY OF AN AG APPLICATION IN PARTICULAR VERTICALLY
- 19 INTEGRATING CALIFORNIA ON THE FERTILIZER INDUSTRY, WHICH IT
- 20 DOES NOT DO TODAY.

21

- 22 BRYAN FRUS: GREAT. I'LL REACH OUT, OR PLEASE FEEL WELCOME TO.
- 23 THANK YOU.

24

25 SPEAKER: THANK YOU.



1 DAVE BREES, CHAIR: THANK YOU VERY MUCH JANICE. THAT WAS VERY 2 3 INFORMATIVE. AND WE LOOK FORWARD TO HEARING ARE GREEN HYDROGEN IS GOING. RIGHT? THERE YOU BASICALLY HAVE A BRIGHT FUTURE AND 4 5 CHALLENGES THERE WHERE WE CAN WORK TOGETHER TO NAVIGATE SOME 6 OF THOSE. 7 8 SPEAKER: ONE THOUGHT TO LEAVE YOU WITH, GIVEN WHAT ABAG IS DOING WITH THE JOINT POWERS AND THE PROCUREMENT, AND THE 9 DESIRE TO DECARBONIZE, ONE AREA OF COLLABORATION COULD BE ON 10 THE REGULATORY FRONT. SO WE'RE ACTIVE, AND ALL THE DOCKETS 11 THAT RYAN MENTIONED, AND SO THERE COULD BE AN OPPORTUNITY TO 12 TEAM UP, AT LEAST INFORMALLY AND COMPARE NOTES. 13 14 DAVE BREES, CHAIR: ABSOLUTELY. THAT TAKES US TO OUR LAST 15 16 AGENDA ITEM, WHICH IS OUR ADJOURNMENT. SO, IF THERE IS -- I'M NOT SEEING ANYTHING ELSE FROM ANYBODY. SO, WITHOUT FURTHER 17 ADO, THANK YOU ONCE AGAIN FOR TAKING THE TIME OUT OF YOUR BUSY 18 WORKWEEKS TO BE A PART OF OUR JOINT POWER PARTNERSHIP, AND OUR 19 PROGRAM, AND THANKS AGAIN TO OUR GREAT STAFF FOR ANOTHER GREAT 20 21 PRESENTATION. GREAT MEETING. SO, WITH THAT I'LL CONCLUDE TODAY'S BOARD MEETING. [ADJOURNED]



Broadcasting Government