## BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Investigation Required by S.B. 275 Energy Amendments, Addressing Cleaner Air Through the Enhanced Use of Alternative Fuel Vehicles,

Docket No. 13-057-02

PUBLIC HEARING
TESTIMONY AND PRESENTATIONS BASED ON

INITIAL AND REPLY COMMENTS

TAKEN AT: Senate Building

State Capitol Complex Salt Lake City, UT

DATE: August 7, 2013

TIME: 9:00 a.m.

REPORTED BY: Kellie Peterson, RPR

1	APPEARANCES
2	741 2740 44020
3	PUBLIC SERVICE COMMISSION:
4	Chairman Allen
5	Commissioner Clark
6	Commissioner LeVar
7	
8	FOR THE DIVISION:
9	Justin Jetter, Esq.
10	Patricia Schmid, Esq.
11	Assistant Utah Attorney General
12	DIVISION OF PUBLIC UTILITIES
13	160 E. 300 S.
14	Fourth Floor
15	Salt Lake City, UT 84111
16	
17	FOR THE OFFICE:
18	Gerald Jensen, Esq.
19	Assistant Utah Attorney General
20	OFFICE OF CONSUMER SERVICES
21	160 E. 300 S.
22	Sixth Floor
23	Salt Lake City, UT 84111
24	
25	

1	FOR QUESTAR:
2	Jenniffer Nelson Clark, Esq.
3	QUESTAR GAS COMPANY
4	333 S. State Street
5	PO Box 45360
6	Salt Lake City, UT 84145-0360
7	
8	FOR UTAH CLEAN ENERGY:
9	Sophie Hayes, Esq.
10	UTAH CLEAN ENERGY
11	1014 2nd Avenue
12	Salt Lake City, UT 84103
13	
14	ALSO APPEARING ON THE RECORD:
15	Kelly Mendenhall, Douglas Wheelwright,
16	Michelle Beck, Merritt Norton, Mark Larsen
17	Mike Salisbury, Matt Pacenza, Spencer Richley
18	Kim Hugie, Carl Clark, Chase Hanchet, Lisa Yoder,
19	Claire Geddes
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## Public Hearing August 7, 2013 PROCEEDINGS

COMMISSIONER CLARK: Good morning. This is a hearing before the Public Service Commission of Utah in the matter of the investigation required by Senate Bill 275 energy amendments, addressing cleaner air through the enhanced use of alternative fuel vehicles.

This is Docket No. 13-057-02 of the Public Service Commission, and this is the time and place dually noticed for the public hearing in this matter. My name is David Clark. I am the commissioner. Seated next to me is Chairman Ron Allen, the chair of the Public Service Commission. He has asked me to conduct the hearing today. Seated next to chairman Allen is Commissioner Thad LeVar. We appreciate your presence today and want to begin by describing the process that we intend to undertake today.

This process was discussed at some length a couple of days ago informally with parties who attended a prehearing conference. There's a sign-in sheet--by the way, forgive my voice today. I have a little frog in my throat, so to speak. I will do my best to speak into the microphone. If you have difficulty hearing me or any of us up here, please let me know.

We have a court reporter here who is taking down

and will transcribe the proceedings today, so that a verbatim record will be kept of them. There's a sign-in sheet that all should have signed who desire to make statements before the Commission today. Our Counsel, Jordan White, has that sign-in sheet. He is the short fellow there in the aisle, and we will be pleased to hear from any of you who would like to make statements to the Commission today. The notice lists this as the date of testimony and presentations.

In our practice before the Commission and by rule of the Commission, we receive both public statements that are offered by members of the public, and we have time set aside to do that beginning at 1:00 p.m. tomorrow in what is called a public witness hearing. We also received sworn testimony, and we will, we will afford the parties and participants in our hearing today the latitude to take either approach in presenting information to us. In other words, you may make a statement to the Commission today or you may provide testimony under oath, including adopting as your sworn testimony written comments that you may have previously filed with the Commission.

Let me note that we've had two rounds of written comments that have been filed and those are available and accessible through the Public Service Commission's website. If you choose to make sworn testimony or to offer sworn testimony and to--and/or to place your comments under oath, you will be subject to cross-examination by counsel for other parties who

1	may be here today. And in a moment, we will have those
2	counsel enter their appearances but if you simply offer us a
3	public statement, then you will not be subject to
4	cross-examination.
5	So let's have the counsel enter their appearances
6	and begin with the Division and then the Office and Questar, I
7	believe, is here, then any other counsel who are here and who
8	desire to enter appearances.
9	MR. JETTER: Justin Jetter for the Division of
10	Public Utilities, and with me, also, is co-counsel, Patricia
11	Schmitz.
12	MR. JENSEN: Gerald Jensen on behalf of the
13	Office.
14	COMMISSIONER CLARK: Thank you.
15	MS. CLARK: Jenniffer Clark on behalf of Questar
16	Gas Company.
17	MS. HAYES: Sophie Hayes, on behalf of Utah
18	Clean Energy and the Southwest Energy Efficiency Project,
19	filing joint comments.
20	MR. CLARK: Carl Clark for Electric Car Company.
21	COMMISSIONER CLARK: Any other counsel desire
22	to enter appearances today? Are there any preliminary matters
23	before we hear from the first presenter? And we intended that
24	to be Questar, followed by the Division of Public Utilities,
25	followed by the Office of Consumer Services. And then we will

1	hearor you will hear the presentation of Merritt Norton, BLU
2	LNG, then Mark Larsen, a member of Plug-in America, and then
3	there are a number of other members of the public who
4	indicated a desire to make a statement. We will begin to
5	identify those after Mr. Larsen's presentation. Those are the
6	only presentations of which we are aware at this time, soyes?
7	MS. HAYES: Thank you. I have Mike Salisbury
8	with me from Southwest Energy Efficiency Program, who has a
9	brief summary of his comments, and then he'll be available to
10	answer any questions the Commission might have. Thank you.
11	COMMISSIONER CLARK: Thank you. Let's take
12	him after Mr. Larsen. Did you say Salisbury?
13	MR. SALISBURY: Yes.
14	COMMISSIONER CLARK: Thank you. All right.
15	Any other preliminary matters before we begin the presentations
16	today? All right, Ms. Clark?
17	MS. CLARK: Mr. Mendenhall will be presenting on
18	behalf of Questar Gas.
19	COMMISSIONER CLARK: Mr. Mendenhall, do you
20	desire to offer sworn testimony?
21	MR. MENDENHALL: Yes.
22	COMMISSIONER CLARK: Will you raise you right
23	hand, please?
24	KELLY MENDENHALL, called as a witness and
25	having been duly sworn, was examined and testified as follows:

1	COMMISSIONER CLARK: Please be seated. And
2	let's make sure we have a microphone in front of you that works.
3	MR. MENDENHALL: How is that?
4	COMMISSIONER CLARK: Thank you. Would you
5	please state your name for the record, your affiliation, and
6	indicate whether you've filed comments and whether you intend
7	those comments to be part of your sworn presentation today.
8	MR. MENDENHALL: Certainly. My name is Kelly
9	Mendenhall. I am the director of regulatory affairs for Questar
10	Gas, and we did file initial comments and I would intend for
11	those to be part of my sworn testimony today.
12	COMMISSIONER CLARK: Thank you. Would you
13	spell your last name for the record?
14	MR. MENDENHALL: Yes, M-E-N-D-E-N-H-A-L-L.
15	COMMISSIONER CLARK: Thank you. Please
16	proceed, Mr. Mendenhall.
17	MR. MENDENHALL: Okay. I think we have had a
18	really good dialogue and the discussion in the docket and I
19	appreciate those who have participated, and so for that reason,
20	I am going to keep my comments very brief.
21	Before I give a summary of our position, I did want
22	to clarify one item that was discussed in Heal Utah's reply
23	comments. And in the last paragraph of their comments, they
24	talked a little bit about a calculation that Questar made
25	regarding a two and a half year payback, and I think there were

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some confusion there, so I just wanted to clarify that so that we could have it, you know, clear on the record.

So if you look at Questar's initial comments, in Section 3, on page 4, we kind of do a little analysis of--about the cost of CNG buses versus diesel buses, and we make mention that the differences in price is about \$70,000. And we go on throughout that paragraph and state that--you know, we use a UTA bus as an example, we talk about mileage, milage per year that the bus runs, and then the gallons or--or the usage, mileage per gallon that that bus gets, and based on that, we come up with a two and a half year payback.

I think Heal Utah thought we were trying to come up with the payback for a station using 24 UTA buses and that's not the case. We were just doing a simple payback, you know, of how long would it take for someone who purchased a CNG bus to pay that back, if you look at just that incremental \$70,000 CNG versus diesel. So I just want to clarify that.

So as far as the Senate Bill 275 goes, as Questar Gas reviewed the bill, we had two main goals related to the bill. The first was we wanted to be supportive of the Governor and legislature and their desire to improve the air quality in Utah; and, second, the Company wants to limit the impact that this bill would have on its customers' rates. Some may say these two bills are diametrically opposed, but the Company believes the way the bill is written, these goals can both be accommodated.

The bill contains a 50 percent revenue hurdle than an entity would have to overcome before these funds become available, and the Company believes that this hurdle would limit the amount of stations that would be built. A handful of large stations would probably be built that would help jump start some entities with large fleets, and while this subsidy -- there would be a subsidy at the outset, most likely. The Company's hopeful that over time as the asset depreciates and as more volumes were sold, that subsidy would be eliminated.

There's been a lot of discussion in this proceeding about electric vehicles and wood burning stoves and the impact they would have on clean air. And while Senate Bill 275 would need to be amended to include these items, Questar is supportive of these ideas as they would improve the air quality in the State, which I think is the ultimate goal of the bill. We would like to note that electric vehicles are being powered by electricity that, ultimately, are being generated mostly using natural gas or coal, and we would be interested to know if anyone has included initial power generation and distribution efficiency in their mission calculation.

There's also been some discussion on the idea that Senate Bill 275 would create a revolving fund, whereby customers would pay \$5 million a year and that would be used to fund stations and other infrastructure. The way the legislation is currently written, that kind of collection would not be possible

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as there is a 50 percent revenue threshold that needs to be met, but Questar's position is that if the intent of the bill is really to collect \$5 million in a revolving fund, that's really just a tax and it should be collected as a tax not hidden in Questar Gas

Questar Gas believes that natural gas is an abundant domestic resource that can be part of the clean air solution for Utah, and that concludes my comments and I thank

COMMISSIONER CLARK: Thank you, Mr. Mendenhall. Are there questions--or cross-examination, rather,

CHAIRMAN ALLEN: Thank you, I have couple question, Mr. Mendenhall. Is it Questar's intent-I will go right to Section 3 of Senate Bill 275, which is the working parts of the collection process; is it is Questar's intent to file or submit a docket, or a filing with us, to achieve the goals of Section 3? In other words, to design that collection process?

MR. MENDENHALL: Yes, I think, I think currently, and this has been discussed a lot in this docket, I think there is kind of some confusion, or there needs to be more dialogue about how this would actually take place. And so I think the parties would need to get together and discuss exactly how the mechanisms would work, how it be funded. You know, Questar, I would assume, would need to file and get Commission

1 approval before these facilities could be built. So I think the bill 2 kind of provides a skeleton or a framework, but I do think that 3 the details need to be fleshed out more. 4 CHAIRMAN ALLEN: Thank you. Okay, great. And 5 then I also noticed there is a provision in there for semiannual 6 collection, and that would be similar to the 191 account that you 7 already have before the Commission, and so I would anticipate. 8 and without answering your question for you, I would anticipate 9 that we would have to determine if something is just and 10 reasonable. 11 MR. MENDENHALL: Yes. CHAIRMAN ALLEN: So we would promptly be 12 13 anticipating something in that regard. 14 MR. MENDENHALL: Yes. 15 CHAIRMAN ALLEN: So we could analyze it and 16 look at the revenue requirement, and, also, we would have to 17 judge, according to the legislation, if the rates spread among 18 different ratepayer classes is appropriate also. So I just wanted 19 to ask that question, and part of it rhetorical, I understand. Also, there is a provision in there that recovery 20 21 could be sought in the next general rate case. You have a rate 22 case that's in front of us right now. Is that the next general rate 23 case or is it the next one after that? Has there been discussion 24 legalistically with your Company? MR. MENDENHALL: It would probably be the next 25

1	one after. And as you know, we just filed that general rate case
2	July 1st, and that filing did not contemplate any stations of this
3	nature. The rate currently we're proposing would be a full-cost
4	rate with no subsidies, and so we did not include any
5	investments or any expenses in that rate case that are related
6	to this bill.
7	CHAIRMAN ALLEN: Thank you for clarify that.
8	That's all the questions I have, thank you.
9	COMMISSIONER CLARK: Thank you, Mr.
10	Mendenhall you are excused.
11	MR. MENDENHALL: Thank you.
12	COMMISSIONER CLARK: Mr. Jetter?
13	MR. JETTER: The Division calls Douglas
14	Wheelwright.
15	COMMISSIONER CLARK: Mr. Wheelwright, thank
16	you for being present today. Do you intend to offer sworn
17	testimony?
18	MR. WHEELWRIGHT: Yes, I do.
19	COMMISSIONER CLARK: Would you raise your
20	right hand?
21	DOUGLAS WHEELWRIGHT, called as a witness
22	and having been duly sworn, was examined and testified as
23	follows:
24	COMMISSIONER CLARK: Please state your name
25	and your affiliation.

1	MR. WHEELWRIGHT: My name is Douglas
2	Wheelwright, W-H-E-E-L-W-R-I-G-H-T. I am a technical
3	consultant with the Division of Public Utilities.
4	COMMISSIONER CLARK: And did you also file
5	comments with the Commission in this matter?
6	MR. WHEELWRIGHT: Yes, I did.
7	COMMISSIONER CLARK: And do you intend those
8	to be part of your sworn testimony?
9	MR. WHEELWRIGHT: Yes, I would like those to be
10	included in this.
11	COMMISSIONER CLARK: Thank you. Please
12	proceed.
3	MR. WHEELWRIGHT: I just have a brief summary.
14	Thank you, Commissioners, for letting us present today.
15	The stated goal of Senate Bill 275 is to reduce
6	vehicle emissions and approve air quality in the State of Utah.
17	The current legislation has a number of objectives and goals
18	that could potentially increase the number of natural gas
19	vehicles and refueling locations in the State. However, the bill
20	does not clearly define the priorities for implementations and
21	does not specifically address possible options other than natural
22	gas vehicles. Since approved air quality appears to be a the
23	primary goal, implementation of this bill should be focused on
24	areas that would provide the greatest benefit to improve air
25	quality.

Recent reports from the US Energy Information

Administration indicated that the use of natural gas as an alternative fuel for transportation is projected to have significant impact on heavy trucks in the future years. A focus on fleet vehicles and not individual consumers is likely to achieve the greatest returns, in terms of approved air quality in the State of Utah.

The Division of Public Utilities has supported the leadership provided by Questar Gas to develop natural gas refueling locations throughout the State and in addition to Questar locations, several individual companies and governmental agencies have installed refueling locations, facilities, for private and, in some cases, public use. These private facilities have been built based on the economic advantages of a lower fuel cost to the individual companies.

Senate Bill 275 asked the Utah Public Service

Commission to explore and develop options and opportunities

and specifically identify four areas to explore. While these

areas should be addressed by the Commission, the bill does not

limit the scope to just these four areas.

The first issue is the role of Questar Gas in the development and future expansion of alternative fuel distribution locations. To date, Questar Gas has taken the lead in developing the infrastructure for natural gas refuelling and currently sets the price for the gas gallon equivalent at the

pump. At the present time, many of the independent stations are matching the Questar price, but this could change in the future as more independent stations are developed and if additional products or services are offered by the independent station owners. While Questar Gas has played an important and active role in the development of natural gas refuelling infrastructure, long-term, wide-spread adoption of natural gas vehicles depends on robust, competitive market.

The second issue to be addressed is the potential funding options to pay for the expanded infrastructure. The bill identifies a \$5 million annual cap but does not provide any funding and does not identify the specific source of future funding. Based on the language of the bill, the Division assumes that the utility will be asked to collect the funds through some future rate mechanism. While this may be an option, it's difficult to see how the utility could collect funds through customer rates and then have a interlocal government entity participate in directing how those funds should be allocated to future projects. The Division would not support redirecting funds that have been designated for other purposes to fund this program.

The third issue is the role of local government in facilitating the conversion to alternative fuel vehicles. Several school districts and other government agencies have already taken the lead in purchasing natural gas vehicles and in

constructing refueling facilities for agency use, and in many cases, have made these facilities available for public use. The new interlocal agency may be able to help improve communication and help facilitate cooperation between variation government agencies.

The forth issue to be addressed is the most effective way to overcome obstacles that may hinder the conversion to alternative fuel vehicles. The wide-spread adoption to alternative fuel vehicles will not occur in absence of widespread refueling infra structure. In a competitive environment, refueling stations will likely not be built if demand for services is insufficient to generate the volume necessary to produce sufficient return on the investment. The success of any program aimed at wide-spread adoption of alternative fuel vehicles will depend upon the development of a competitive market.

In summary, the Division views the bill's objective as promoting improvement of air quality to the conversion or replacement of existing vehicles to run alternative fuels, primarily natural gas. In the short run, the primary focus should be on the conversion of commercial vehicles. A focus on fleet vehicles will likely achieve the greatest returns for improvement in air quality.

Incentives and funding should be given to the projects that will have the greatest impact on air quality.

1	Questar Gas, the interlocal entity and air quality regulators
2	should work cooperatively to prioritize and identify the most
3	effective programs and opportunities.
4	In the long run, the Division recommends measures
5	to design encourage development of a competitive natural gas
6	infrastructure. Thank you.
7	COMMISSIONER CLARK: Thank you. Is there
8	cross-examination for Mr. Wheelwright? Any questions? Thank
9	you, Mr. Wheelwright, you are excused.
10	Mr. Jensen?
11	MR. JENSEN: Michelle Beck will be giving
12	testimony from the Office of Consumer Services.
13	COMMISSIONER CLARK: Thank you, Ms. Beck. Do
14	you desire to offer sworn testimony?
15	MS. BECK: Yes, I do.
16	COMMISSIONER CLARK: Will you please raise you
17	right hand?
18	MICHELLE BECK, called as a witness and having
19	been duly sworn, was examined and testified as follows:
20	COMMISSIONER CLARK: Thank you. Please be
21	seated and state your name for the record and your affiliation
22	and title.
23	MS. BECK: My name is Michelle Beck and I am
24	director of the Office of Consumer Services.
25	COMMISSIONER CLARK: Thank you. And the

1 Office, I believe, filed comments in this docket, previously. 2 MS. BECK: Yes, the Office filed 13 of initial and 9 3 pages of reply, and we would like that incorporated as part of 4 my testimony. 5 COMMISSIONER CLARK: Thank you. Please 6 proceed. 7 MS. BECK: All right, thank you. Good morning, 8 Chairman Allen, Commissioner Clark, Commissioner LeVar. I 9 appreciate the opportunity to speak on behalf of the Office 10 today. For those in the audience who are unaware of who we are, it's a slightly different crowd today, we, by statute, are here 12 to represent small commercial and residential customers of 13 public utilities, and we try to focus our comments from that 14 prospective. 15 Based on my increasingly long history in front of 16 this Commission, I am confident that you read thoroughly the comment that I filed, so rather than reiterate our answers to the 18 specific questions or summarize the entire set of comments. I 19 would really like to focus on a few types of recommendations for 20 you here today. I would like to start with what the Office 22 recommendations are to you as a Commission in your ongoing 23 work related to this, and our first one is that we think it really is 24 important to maintain cost of service regulations for the 25 provision of natural gas, Rather than burdening natural gas with

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costs that are unrelated to the provision of utility service. We think this continues the benefit that natural gas has provided to customers, and to be clear, the Office concurs that natural gas has provided substantial benefits to the customer--to the utility customers of Utah, and we think that moving forward with the same attention to cost of service that the Commission has paid in the past and has really attended to trying to remove any cross subsidies and such. We think it is that focus that will best maintain benefits for customers.

Including, as a matter of fact, our second recommendation, which is to establish and maintain cost of service rates for the provision, utility provision, of NGV service. In our view, and we think that there are alternate suppliers who have participated in this process who certainly confirm that view, the best way to ensure the sustainability of this as an industry, the idea of having natural gas vehicles and natural gas vehicle fueling infrastructure, is to allow more robust market to develop.

And while there are some intrepid entrepreneurs who are in this field already here in Utah. There are others who find that there are--the obstacles to entry are too great with having to compete against a subsidized utility service. So we think that would be an important role for the Commission to play going forward.

We also think that we need to establish a proper

framework for the development of electric vehicles, so I think if we go back and look at the actual legislation, there were three parts to this legislation, and two of those parts were very broad and really focused on alternative fuel vehicles more broadly defined. The third part did describe a particular funding mechanism that related to Questar Gas and the provision of NV service. But the bill itself asked for broader examination and so I think electric vehicles are encompassed in at least two-thirds of the intent of the bill there.

Some of the interveners in front of you are the-well, I guess we didn't have intervention, the parties in front of
you in this proceeding have advocated for some specific
framework for electric vehicles, for example, time of day rates.
And we as an office and representing the small customers of
Rocky Mountain Power, as well as the customers of Questar, do
not believe that that would be found to be in the public interest.

Of course, there is enough evidence before you to rule on that issue, which is why our recommendation is to address that issue in an appropriate regulatory forum. And, perhaps, that would require opening a new docket for this, but I think that a wide enough variety of customers of Utah utilities see value and potential value in electric vehicles that it would be in the public interest to try and get ahead of that curve a little. Certainly, other markets are seeing a much larger development of electric vehicles and have addressed

infrastructure needs and now would be an opportune time for Utah to do the same.

And, finally, regarding the Commission's actions itself, we would urge caution on any kind of mandates for Questar to make a filing under Section 3 of that legislation. Questar did an excellent job describing the parameters for revenue filing and one of the key parameters is that there needs to be a demonstration that 50 percent of revenue requirements of incremental infrastructure done under this legislation would be provided. I think that is quite a hurdle and is not something that could be achieved by Questar on its own.

So to try and require a filing by a date certain, I think, would lead to its ultimate demise. This is something that probably needs more collaboration and in the background. Now mind you, it's not something that the Office supports at all. We don't think there needs to be any subsidy, but to the extent that such a filing comes forward, I think additional collaboration is necessary.

The next thing I would like to speak to is some recommendations to what the Office would suggest to the Commission it may want to include in its report to the legislature. First we noted that the commenters had near consensus about the idea that in the long-term, competition for natural gas vehicle fueling infrastructure would promote the sustainability of the industry. We think that is something that

would be important to note to the legislature.

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We also think that the significance interest in electric vehicles would be of note for such a report. We also believe that the there were some strong agreement that some of the different alternative fuel vehicles should be afforded some similar incentives, and that's outside my own expertise, but I feel like it is something that could be mentioned in a report for further consideration from these policymakers.

And more specifically than that, we would really want to even the playing field, so there is the idea of incentive for different vehicles and then there's the idea of at least not disadvantaging any vehicles. And I would point out that any artificial increase in the price of natural gas itself, in fact, would translate into a disadvantage for at least some of the other alternative fuel vehicle options that are out there.

And I think it is also--it would be important to point out some of the payback period information that has been provided. It's difficult for me, as an individual and for me as an advocate who represents many, many small customers throughout the state, to understand when gasoline, just regular gasoline, the last time I filled up, I don't think it's changed much, was, I think, \$3.70 a gallon, and the full cost of service rate has been asserted to be \$1.68 per gallon equivalent.

So the cost advantage alone should be incentive enough when there is a two, or two and a half, or I have heard

testimony in front of the legislature that in some instances, it's less than a two year payback, that doesn't seem to be in the public interest to need to offer further incentive for switch there. The economic incentive alone should suffice. There are a lot of demands on the public moneys that is are collected here in Utah and I think that this sort of payback period should be a factor in that.

Finally, I would offer the following recommendations somewhat more broadly. It may be appropriate for a Commission report and I certainly think it's appropriate for policymakers to consider. I recommend that policymakers allow public utilities to focus on the provision of utility service. We also recommend that policymakers collect the best air quality data possible and then pursue the most cost-effective solutions to our air quality challenges.

Certainly. The idea of pursuing the most cost-effective solution is something that is a longstanding principal inside of utility regulation. I think it has served utility customers well. I think broadening that principal to the problem of air quality would serve Utah citizens well, as well.

I would urge policymakers to be sure not to forget other alternative fuel vehicles. I went back and carefully read the legislation several times. The first two sections really do primarily refer to it broadly as alternative fuel vehicles. So I think this is a case where multiple solutions can really--or

1 multiple solutions can really lead to improvements. 2 And, finally, I would urge policymakers to consider 3 funding mechanisms that provide transparency, and, also, that 4 attempt to match those who pay for the solutions, either with 5 those who are causing the problem or those who are benefitting 6 from the solution. Again, this is a principal of cost causation 7 from longstanding and utility regulation. It has served utility 8 customers well. I think it can serve citizens well with the 9 broader application. And that concludes my comments today in 10 front of you. 11 COMMISSIONER CLARK: Thank you, Ms. Beck. 12 Are there questions or cross-examination for Ms. Beck? Thank 13 you very much. You are excused. 14 Merritt Norton? Do you desire to offer sworn 15 testimony? 16 MR. NORTON: Yes, sworn testimony. 17 COMMISSIONER CLARK: Please raise your right 18 hand. 19 MERRITT NORTON, called as a witness and having 20 been duly sworn, was examined and testified as follows: 21 COMMISSIONER CLARK: Please be seated, and if 22 you would, state your full name for the record and spell it, and 23 then identify your organization and affiliation. 24 MR. NORTON: Sure, Merritt Norton, M-E-R-R-I-T-T 25 N-O-R-T-O-N. I am the CEO of BLU, which is a Utah based

1	natural gas station builder and operator, an alternative fuel
2	station builder and operator located here in Salt Lake City.
3	COMMISSIONER CLARK: Thank you. Did you file
4	comments?
5	MR. NORTON: Yes, we did file comments, yes.
6	COMMISSIONER CLARK: And do you intend those
7	to be part of your sworn testimony today?
8	MR. NORTON: Yes.
9	COMMISSIONER CLARK: Thank you. Please
10	proceed.
11	MR. NORTON: We really appreciate the
12	opportunity, Commissioners, to speak for a moment today and
13	we do have a PowerPoint presentation we would like to present
14	for your view and —
15	COMMISSIONER CLARK: Mr. Norton, before you
16	begin, if that has not been filed with the Commission, may we
17	ask that you file a paper copy of it at some time in the near
18	future?
19	MR. NORTON: Absolutely.
20	COMMISSIONER CLARK: So we can have it as
21	part of our official record?
22	MR. NORTON: We will do that.
23	COMMISSIONER CLARK: Thank you very much.
24	MR. NORTON: Thank you very much. So my
25	testimony today is a little bit more ad hoc, but I would like to

start out by commenting that Utah has a national representation 1 2 and a long history and tradition of sensibility surrounding limited 3 government, pro business, low taxes, and pro free enterprise entrepreneurial activities here in the State that, I think, is well 4 5 known across the United States. We are--and I am proud, as a CEO, to represent 6 7 Utah's largest private investor and builder of alternative fuel and 8 natural gas fuelling stations in the State. We are very active in 9 the State of Utah, as well as in other states in the western 10 United States, and feel like that there are a lot of opportunities 11 and benefits to natural gas vehicles and infrastructures, both for 12 the State of Utah and for the United States, in general, and in 13 our country. COMMISSIONER CLARK: Just for the record, Mr. 14 15 Norton, let me indicate your presentation is viewable by the 16 Commissioners through the monitors we have in front of us and 17 it is also now being displayed for the parties who are here 18 today. 19 MR. NORTON: Great. 20 COMMISSIONER CLARK: Thank you. 21 MR. NORTON: I just wanted to run through, for the 22 Commissioners, what we have been doing recently in the State 23 of Utah as natural gas infrastructure as a private entity and talk

a little bit about the investment we've made and the

opportunities that we see.

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Starting out, I would like to present a map that outlines the natural gas vehicle fueling, public fueling infrastructure here in the State of Utah. Questar, along with many other private entities. I think have done a great job developing some really great infrastructures in the State of Utah. As you look at this map, I have a hard time identifying where you can easily travel in the State of Utah and get a fill up on natural gas. The only opportunities that I really see for maybe not being able to might be Manila, the County seat of Daggett County, potentially some areas of Box Elder County, potentially Delta, Utah, might not be served by natural gas, but as you review this map, especially along the Wasatch Front but also in the rural areas where a lot of the population exists, we have quite a robust and rapidly developing in natural gas fueling station infrastructure in this State, and recently, in the past couple of years, has been led by a private investment in natural gas fueling stations.

The first comment that I would make is that we believe that the more appropriate role of government and quasi government agencies would be to help spur demand and drive increases in vehicle adoption as opposed to infrastructure. Infrastructure is coming along very nicely and we have a very robust set of infrastructures, and over the past number of years, the Public Service Commission has helped play a role in helping jump start the infrastructure and we appreciate that.

This is the first natural gas station that we built in the State of Utah, here in Salt Lake City on 21st South 9th West. It's located on the Flying J Travel Plaza there. This station is a very robust LNG fueling station and also happens to be, we believe to be at least equal to or faster, than the fastest filling compressed natural gas station in the United States.

And we have a lot of capacity here at this station, and, in general, this station has the capacity of probably eight to 12 normal compressed natural gas filling stations that you would see in State of Utah and, perhaps, more in capacity. And so a tremendous amount of capacity here at this station. That was the first station that we constructed.

The second station we constructed is on California Avenue, also here in this City, in Salt Lake City. The third station--this isn't actually in chronological order but our third station here in Salt Lake City was codeveloped between us and Maverik, and that is out near the airport on California Avenue. We have not implemented CNG at this station because of concerns surrounding the competitive landscape, especially relating to light duty vehicles in the State of Utah.

As we have heard already today, and one of the reasons we are testifying today is, it's a tough state to compete on a CNG level. So we focused on LNG and CNG for very large, heavy duty vehicles, which is an area which we can compete, where we are obviously less competitive on the light duty

vehicle side because of te current pricing structure that is basically setup here in the State of Utah.

The third station--actually this is the second station but the third on our list--or the forth is a station we built in Beaver, Utah, in support of UPS. United Parcel Service heavily utilizes this station and also several other stations in the Salt Lake City area. They have made a very large commitment to natural gas alternative fuel vehicles. I believe they have, at the largest fleet owner in the world, operated about 99,000 large fleet vehicles in their fleet and have been a big advocate of clean air and natural gas in the State of Utah.

We have also constructed a station in Hurricane, Utah, near St. George, and we've just opened a station in Myton, Utah. This actually is a picture of half of the station. There is at least another portion of the station that's at least half as big as the station that you see that is already constructed. This station out in Myton, Utah, in support of some of the energy development out there, in that portion of State, has the infrastructure and potential to become the largest CNG and LNG capacity fuelling station in North America. At this point, someone may surpass us, but right now, we're not there yet, but we have the infrastructure in place, the lanes, and the opportunity to grow to the point where it would be the largest volume CNG station, LNG station, in North America.

And we are under construction right now with

Maverik on another large fuelling station in Ogden, Utah.

And with that, that is kind of the end of that portion of our presentation. We can probably skip over this, Patrick. We have a little video and I will just skip over. But we've invested in the past year or so \$17 million in natural gas fuelling infrastructure in the State of Utah. We have grown tremendously to an employee base of over 150 employees at this stage in our life cycle and are growing quite rapidly and adding to both natural gas infrastructure in the State and job growth in the State of Utah.

This comment been made several times in the past, but one of our suggestions to the Public Service Commission, and also just in general, looking back on our national reputation as the State of Utah for doing thing efficiently and cost effectively, we believe strongly that private commercial vehicles are the most cost effective and the best cost benefit for cleaning up the air.

And this slide just gives an opportunity to take a look; based on our calculations, a large 18-wheel natural gas powered vehicle displaces the same amount of fuel as about 30 Honda Civics, and that is probably a conservative estimate vehicle, so we put one of those vehicles on the road. Some of these vehicles also operate in the State of Utah 24 hours a day, and if you pick one of those vehicles out and the impact is probably three times greater than the impact we are showing

here.

So there is a big cost benefit to--when we are talking about cleaning the air, we are talking about fuel burn, and the more fuel burn you displace, the more air you clean.

And these heavy-duty commercial vehicles burn a lot of fuel, a tremendous amount of fuel, and so there is a big cost benefit to that.

With that, we would just--you know, our comments would line up around a couple of concepts. First, as I mentioned before, we feel like a large emphasis and the government's role and, potentially, the Public Service Commission's role should be more directed toward the demand side and driving actual--getting the vehicles on the road.

No. 2, we believe it's important to take a really hard look at the cost benefit analysis of whatever the goals are of this legislation, or whatever are goals are, if that is clean air, or if that is foreign oil displacement, whatever those goals actually are, we believe that a cost benefit is an important to factor in.

We do not believe that rate base construction of alternative fuels, or any kind of gas stations or fuelling stations, are the right mechanism to drive the market forward. We believe strongly that Utah entrepreneurs and private industry is best suited to drive the natural gas infrastructure and the natural gas vehicle industry forward in the State of Utah. We are very concerned about the potential for this legislation,

1	depending on how it's implemented, to severely impact our
2	ability to compete out in the marketplace. I have go out and
3	raise private capital and give those private capital investors, you
4	know, a nice return on their investment or they went continue to
5	invest. That is how the free market works as we all know. And I
6	cannot compete against rate based fundraising, or the Utah
7	Legislature, or any kind of tax based or rate based fundraising
8	being an entrepreneur out in the free market raising private
9	equity capital to develop infrastructure and to develop this
10	business.
11	We believe that the principals we have outlined are
12	something that Utah has a representation for and we think we
13	should move forward under those guiding principals going
14	forward in developing our natural gas infrastructure here in the
15	State of Utah and I appreciate the opportunity to testify. Thank
16	you.
17	COMMISSIONER CLARK: Thank you, Mr. Norton.
18	Are there questions for Mr. Norton? Thank you, Mr. Norton, you
19	are excused.
20	MR. NORTON: Thank you.
21	COMMISSIONER CLARK: Next we will hear from
22	Mr. Mark Larson. Mr. Larson, do you desire to offer sworn
23	testimony?
24	MR. LARSEN: I am happy to do so.
25	COMMISSIONER CLARK: It's your option and if

1	you would like to, then I will administer the oath.
2	MR. LARSEN: Okay.
3	COMMISSIONER CLARK: Please raise your right
4	hand.
5	MARK LARSEN, called as a witness and having
6	been duly sworn, was examined and testified as follows:
7	COMMISSIONER CLARK: Thank you very much.
8	MR. LARSEN: Yes.
9	COMMISSIONER CLARK: And if you havedo you
10	need a moment or two to setup?
11	MR. LARSEN: Yes, if I could just have a moment
12	to connect my computer, as well.
13	COMMISSIONER CLARK: Sure.
14	(A discussion was held off the record.)
15	COMMISSIONER CLARK: Ladies and gentlemen,
16	we are going to take a break for five minutes, so we will be off
17	the record until about 5 minutes to.
18	(Whereupon, a break was taken.)
19	COMMISSIONER CLARK: Thank you, ladies and
20	gentlemen for your indulgence there. Before we hear from Mr.
21	Larsen, I thought I would just read the list of names of others
22	who we have identified as potentially, at least, making some
23	kind of statement today before the Commission. And if you are
24	here and if you do not intend to make a statement, then please
25	indicate; otherwise, we will assume that you do.

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1	So as I mentioned, after Mr. Larsen, we will have
2	Mr. Salisbury, and then Mr. Pacenza. Then the following:
3	Spencer Richley, I have Patrick Belnap and Zachary Wester
4	from Blu NGI; I imagine they are not here to make statements;
5	is that true? Thank you. Kim Hugie, and do you intend to –
6	MR. HUGIE: Yes.
7	COMMISSIONER CLARK: Right, thank you, okay.
8	Denise Brems (sic)?
9	MS. BREMS: No.
10	COMMISSIONER CLARK: Okay, thank you. The
11	person with the last name of Emory (sic.)
12	MS. EMORY: No.
13	COMMISSIONER CLARK: Okay, thank you. And
14	Carl Clark.
15	MR. CLARK: Yes.
16	COMMISSIONER CLARK: Chase Hanchet?
17	MR. HANCHET: Yes.
18	COMMISSIONER CLARK: Michelle Sharp (sic) or
19	Scharp?
20	MS. SCHARP: It's Scharp. I am going to withdraw
21	my comments.
22	COMMISSIONER CLARK: And Lisa Yoder?
23	MS. YODER: Yes.
24	COMMISSIONER CLARK: Thank you.
25	MS. GEDDES: My name isn't on there but Claire

1	Geddes. I would like to speak, also.
2	COMMISSIONER CLARK: I have added your name
3	and we will be pleased to hear from you.
4	Mr. Larsen, you've been sworn.
5	MR. LARSEN: Yes.
6	COMMISSIONER CLARK: Would you please state
7	your full name and spell it for the record, and indicate any
8	affiliation that brings you before us today.
9	MR. LARSEN: Yes, I would be happy to, thank you.
10	I appreciate the Commission listening to me.
11	My name is Mark D, as in Dallas, Larsen, M-A-R-K,
12	and Larsen, S-E-N, Danish, not Swedish. I really do appreciate
13	being here today. I should state upfront that I'm simply a
14	private citizen. I am not a paid lobbyist for any organization or
15	industry representative, so I don't really have a vested interest
16	in alternative fuel, but as a citizen, I am concerned about our
17	State and quality of air in our State and the environment and
18	where our current policies and practices have been taking us.
19	COMMISSIONER CLARK: Mr. Larsen, did you file
20	comments with the Commission?
21	MR. LARSEN: Yes, I did file comments.
22	COMMISSIONER CLARK: I thought so.
23	MR. LARSEN: In the docket on June 19th, and I'll
24	be showing those here. We will go over them a little bit in my
25	presentation.

COMMISSIONER CLARK: Do you intend those to 1 2 be part of your sworn statement today? 3 MR. LARSEN: Yes, they are fine. 4 COMMISSIONER CLARK: Thank you. Please 5 proceed. 6 MR. LARSEN: Okay. As a profession, I am a 7 semiretired professor from Utah State University, but I am a 8 strong electric vehicle advocate. I am a member of many 9 nonprofit organizations that encourage citizens to drive electric 10 vehicles; among them, Plug In America, which is probably the 11 best known. Those that wish to know more about me, they are more than welcome to look at my web pages. They will find 12 13 many weeks there. There is the web address if you wanted to 14 take a look at it. 15 But you will see there on my web pages that I have 16 a lot of information about electric vehicles. In fact, I should 17 state that I don't just talk the talk, I walk the walk. I actually 18 drive an electric vehicle. I have for the last 16 months. My 19 Nissan Leaf was the very first one that Nissan delivered in the 20 State 16 months ago. It now has nearly 12,000 miles on it, and 21 I power the vehicle with solar panels on my roof and, thus, 22 produce zero emissions for Utah, and I am convinced this is the 23 way that many citizens ought to go. Now we know that Governor Herbert, in his State of 24 25 the--State Address this year did mention that air quality in Utah

and the deterioration of that air quality, the biggest piece of that pie is the transportation sector. I think he said about 57 percent of it, so it only makes sense that we should look at transportation as an area that we need to address to improve the air quality in the State.

Several years ago, our lawmakers approved incentives for natural gas and electric vehicles but they weren't equitable. They approved \$2,500 incentive for the purchase of natural gas vehicle but only \$750 for an electric vehicle, and then two years ago, they even retained the incentive \$2,500 for natural gas, but reduced the incentive for electric vehicles even further to \$605 and that is where those incentives stand right now. They are net equitable and they don't make very much sense when you think about it.

I decided to try to help our legislatures get a handle on the actual facts, the data about the different alternative vehicles; that I would provide them data from the Environmental Protection Agency, the EPA, on the emissions of these vehicles, and I provided that, this is what I put into the docket and what is in the document that I gave. I will pull down here and open up a copy of that. It is on my website. That compares an electric vehicle to natural gas vehicle. This is the docket that is in the docket and also here on my web page. I think the key part of it has to do with the table that compares these vehicles down below side by side.

The Honda natural gas Civic is the only commercial, OEM, vehicle available for natural gas for a passenger car. There are some others for heavy-duty commercial vehicles. I did hear two days ago that Ford intends to finally release a natural gas version of its F-150 truck and we can look forward to that, but for right now, the Honda Civic natural gas vehicle is the only one available to the public.

On the other hand, among the electric vehicles, there are many. The Nissan Leaf is the best selling one so far, but there are many others. There is Ford Focus EV, the Smart has an EV. BMW just released their's that will be available about a year from now here in Utah, the I-3, but since the Leaf and the Honda Civic are about the same, those are the two vehicles I compared.

Now I would like to stress, it's not that I am necessarily against natural gas. I think it does have its place. I especially think that it has definite advantages when it comes to commercial and long-range use because it does have longer range than electric vehicles. You can see down here using 90 percent of the fuel of either the Leaf or Honda Civic, obviously, the Honda Civic can go further, according to the EPA.

And when it comes to fuelling, well, it also beats an electric vehicle. You can fuel a natural gas vehicle in much less time, ten to 20 minute at one of these commercial stations. The electric vehicle, well, you are only going to fill that up with a fast

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charge station in about 26 minutes, from 0 to 80 percent. We don't have any of those, yet, in Utah, even though they are all over the West Coast. I assume that we will be getting some soon. There is one scheduled to be put in to here into the Salt Lake Valley in the near future.

But like I said, it seems to me that when it comes to commercial uses and long-distant commercial uses, that natural gas is a good solution. It's not the best solution in a lot of respects because, in my opinion, it's also a fossil fuel. It will run out eventually, just like oil, but it is a good bridge to get us to the future. One, is domestically produced rather than spending money over seas to foreign countries; two, it cleans much cleaner--it burns much cleaner than gasoline, okay, and it's also more efficient than gasoline in that respect. It's not, however, the best solution for just every day commuting for most of our citizens. When they need to get to and from work, they go to the grocery store, they go shopping, go to the mall or to a restaurant, in those instances, it's just a plain fact that electric vehicles are the winners. You can compare the EPA stats for them. When it comes to smog scores from the EPA, electric vehicles score a perfect ten. Natural gas is high, it's up there at an eight or nine, but it is not quite a perfect ten. Then you have the greenhouse gas emissions, you have got the miles per gallon equivalent ratings and you have got the average fuel cost, and all of those areas, electric vehicles are the better

solution.

Now, I would imagine that everybody that came here today drove a car. How many cars drove here today by the way? I am sure you all drove a car here. It's simply the way we function, and I would like to open up here a utility--where is my utility, there it is, that helps us compare the differences on a practical basis, what we really do and what we really have.

We all drove here and probably different distances to get here, but for argument sake, let's assume that we came here from way down in Draper, all the way up to the Capitol, down to the Point of the Mountain, the whole Valley. If we did that, about 20 miles to get here up to the Capitol today, then to get home again, that is another 20 miles, so we can say that it's typical for somebody from the Point of Mountain to drive 40 miles today to attend this hearing. Now the question comes up what kind of mileage do you get in your car.

Anybody know what the average mileage is of the gasoline car right now in the country?

SPEAKER: About 30?

MR. LARSEN: Actually, no. The average right now is 24.6. It's going up higher than it used to be but now it is the 24.6. Now if you are driving an average car and you are doing the 40 miles today, what would that be? Well, gasoline--well, you are putting about 40 pounds of greenhouse gases into the atmosphere to get here today, about eight pounds of that was

produced upstream to extract and to refine and ship and transport and pump the gasoline, and then another nearly 32 pounds came out of the tailpipe today, so nearly 40 pounds.

Natural gas vehicles, if you had that Honda Civic, it's actually producing more upstream to extract and compress and ship and pump that natural gas. It's producing about 11.2 pounds but it's producing much less from the tailpipe. It burns cleaner in the car. About 19 pounds from the tailpipe. All told then, about 30, 31 pounds of greenhouse gasses in a natural gas vehicle. That is nine pounds less than the gasoline car that gets average mile per gallon in the United States.

But now look at the electric vehicle; it produces just a tad even more than the natural gas upstream to produce that electricity because our grid isn't completely clean. We have a lot of coal, and as a result, it produces just a bit more; about .26 pounds more to drive those 40 miles, but it has no tailpipe. So whatever it's producing upstream is it for greenhouse gases. It's producing only 11.46 pounds of greenhouse gases and not really producing them here in the Valley where the inversions occur.

So when you look at it across the board, you have got gasoline at nearly 40 pounds of greenhouse gases, natural gas is about 30, 31, and electric vehicle is about 11, 12 pounds of greenhouse gases. There is no question that the electric vehicle is the cleanest. Then when you look at the cost, well,

that gasoline, I checked last night, it's \$3.72 average right now in Utah, so that would be \$6.04 to drive the 40 miles today. The natural gas, \$2.05, according to the average in Utah right now, which is \$1.59 as of last night. Why, that's, gee, about a third of what gasoline is costing, but now look at the electric, with our electricity rates, it is 996.

So electricity is not only cleaner, not only more efficient, it is also cheeper. More money in our consumers' pockets to spend here locally instead of sending it overseas to foreign countries. Electric vehicles are clearly the winner.

I would like to invite somebody to give me their daily commute so we can compare their mileage, any of the Commissioners would like to tell us how far you drive to get here? What your mileage is in your car so we can also compare? No?

COMMISSIONER CLARK: I think--I mean, this is an illustration that I think makes your point very well, Mr. Larsen.

MR. LARSEN: I think so. Let me do one more then, just off the top of my head. Say you wanted to get a highbred vehicle, a Toyota Prius. It is rated 50 miles to the gallon. So if you did that 40 miles today but you got 50 miles to the gallon, what is the difference there? Well, interesting enough, that Prius would produce less greenhouse gases than the natural gas. It would still cost you about a dollar more to

drive the Prius, but it would have reduced the amount of greenhouse gases. Not so with the electric vehicle. The electric vehicle is still producing less and it is still costing much less, even with the Prius.

I think it's necessary for our legislatures to take a look at the actual data as to what vehicles are producing, what kind of emissions, and at what cost. What I would encourage is for our lawmakers to increase the incentive for electric vehicles to at least the same level as natural gas, if not higher since they are the cleaner vehicles, if the whole purpose of this is to improve the air quality in Utah.

That's the point of my presentation today, and I thank you for your attention. Questions, I am happy to entertain them.

COMMISSIONER CLARK: Any cross-examination for Mr. Larsen? Yes.

MR. HUGIE: Those upstream costs, does that include the cost of manufacturing the batteries and disposing the batteries?

MR. LARSEN: Well, that is a cost that is from the manufacturers, that the manufacturers has to pass on to consumers eventually. The same thing is as you know, what does it cost to produce an engine and the transmission in a regular car. There are costs to the manufacturer and the manufacturers are trying to address building the batteries,

1 building the electric drive motors for those cars. 2 MR. HUGIE: I read an article that states that cost 3 of manufacturing the battery and disposing of those huge 4 batteries is far dirtier than anything you are going to get from, 5 even gasoline. MR. LARSEN: Yes, I also read those articles. 6 7 There is one study out in Norway. 8 COMMISSIONER CLARK: Mr. Larsen? It would be 9 better if you just face the microphone. 10 MR. LARSEN: Sorry, there is another study 11 published after that from Switzerland that shows that their data 12 was huge and that actually manufacturing and clean up the batteries is better for the environment than traditional cars with 13 14 the oil and everything else. People have to realize, you know, 15 even the batteries we have in our cars are lead acid batteries. 16 They are one of the most recycled components we have in 17 society, and 99 percent of them are recycled, and there is no 18 reason not to do that with electric car batteries. 19 They are not as toxic as lead acid, but in reality, 20 once they deteriorated to the point of, say, 70 percent capacity, 21 manufacturers are talking about turning those over to electric 22 utilities to use as storage backup for when their are blackouts, 23 brownouts, etc. There are uses for those. You don't want to just throw them away. They are valuable commodities, probably 24

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the most valuable part of car.

We are in kind of a transition here with that but the 1 2 manufacturers are aware of it. Nissan Leaf are building their 3 batteries now in Tennessee, here in the USA. They have a 4 battery factory there and from all reports of telling us, they most 5 certainly plan to recycle those batteries. 6 I can tell you in Japan, they are already a step 7 ahead of us. Nissan has built these units that you put in your 8 garage that you can put your old battery in as a backup for your 9 own home if the lights go out, and you can then use that used 10 battery to run your refrigerator and things until the blackout has 11 ended. So they are already a little bit of ahead of us there. I 12 have to commend them on that. 13 That is a good question. There is, by the way, links 14 on my web page if you want to read that study from Switzerland. 15 COMMISSIONER CLARK: Any other questions for 16 Mr. Larsen? Chairman Allen. 17 CHAIRMAN ALLEN: Mr. Larsen? 18 MR. LARSEN: Yes. 19 CHAIRMAN ALLEN: Pertaining to your upstream 20 greenhouse gas component-21 MR. LARSEN: Yes. 22 CHAIRMAN ALLEN: --for electric vehicles, power 23 plants, do you remember what your assumptions were on the ratio of where that electricity is coming from, from coal to 24 renewables to natural gas based power plants? 25

MR. LARSEN: Yes, and it is not necessarily my ratio. These figures came from the EPA according to our region. When you get into the EPA side and look these things up, you can select the region you are in, and in our case, Rocky Mountains Power is part of PacifiCorp, and these are the figures that come up from PacifiCorp.

Now in reality, PacifiCorp's pretty good, a lot better than what they are doing over in Colorado with a lot more coal than even we have here in Utah, but there is a mix there.

PacifiCorp has a lot of wind, a lot of hydro, and then we've also got coal within that. That is where the mix came from and where those greenhouse gases come from is from our major utility.

One thing to keep in mind with that, I would suggest, people often say that, well, yes PacifiCorp, they have a loft of hydro and wind but not necessarily in Utah. We have more coal and natural gas, by the way, here for our electricity.

But the truth of the matter is, you know, air doesn't stop at the states' borders. It all circulates, whatever they're producing over in Nevada and Oregon and Washington, it comes our way with the jet stream, and what we are producing floats east toward Wyoming and Colorado.

So, really, it is the part of the whole mix and that's--those are the figures, those are the data that the EPA assigns for our section.

CHAIRMAN ALLEN: That answers my question.

1	Thank you.
2	MR. LEVAR: Could you just define for us what you
3	included in your as greenhouse gases in your analysis?
4	MR. LARSEN: Yes, that is also from the EPA. They
5	are hydrofluoric, there are carbon dioxide and also methane.
6	What the EPA does is they separate out smog scores that are
7	pollutants with particulates from the greenhouse gases, which
8	are the carbon dioxide, the hydrofluoric carbon and the
9	methane. That's why I also listedif you will check here with
10	what I submitted on the docket, why I also provided the EPA
11	smog scores because these are the ones that deal with the
12	particulates, okay. So this is the greenhouse gases, these are
13	the actual pollution particulate scores, the EPA smog scores.
14	And if you get into the EPA's site, they list specifically the
15	different things that are there, the nitrous oxide, etc.
16	CHAIRMAN ALLEN: Thank you.
17	COMMISSIONER CLARK: Thank you, Mr. Larsen,
18	you are excused.
19	MR. LARSEN: Well, thank you very much. I
20	appreciate the time.
21	COMMISSIONER CLARK: Mr. Salisbury, I think, is
22	next.
23	(A discussion was held off the record.)
24	COMMISSIONER CLARK: Mr. Salisbury, do you
25	intend to provide sworn testimony.

MR. SALISBURY: I do. 1 2 MIKE SALISBURY, called as a witness and having 3 been duly sworn, was examined and testified as follows: 4 COMMISSIONER CLARK: Thank you. Please be 5 seated and provide your full name, spell it for the court reporter, and provide us any information about the affiliations that bring 6 7 you here today. And did you file comments? 8 MR. SALISBURY: Yes, prefiled comments. 9 COMMISSIONER CLARK: I thought so. And do 10 you intend those to be part of your sworn testimony today before 11 the Commission. 12 MR. SALISBURY: Yes, we do. My name is Mike 13 Salisbury, M-I-K-E, S-A-L-I-S-B-U-R-Y, and I work as a 14 transportation research analyst for the Southwest Energy 15 Efficiency Project. 16 COMMISSIONER CLARK: Thank you. Please 17 proceed. MR. SALISBURY: Thank you. So if you are not 18 familiar with the Southwest Energy Efficiency Project, or 19 20 SWEEP, we are public advocacy organization. We are promoting 21 energy efficiency across the southwest. We work in Utah, 22 Colorado, New Mexico, Arizona, Wyoming, and Nevada, and I 23 specifically work on transportation policy, where we are looking 24 to promote more efficient vehicles and encouraging ways for 25 people to drive their vehicles less.

So I want to thank you this morning for hearing my testimony. It is greatly appreciated. SWEEP, and we submitted comments along with Utah Clean Energy. And, specifically, are looking at the air quality and economic benefit of electric vehicles and policies that can help facilitate these optional EVs and help the State of Utah achieve the greatest amount of benefits possible.

So I first want to focus on air quality. Because of the significant air quality issues and challenges in the Wasatch Front, we did a specific analysis on what the benefits of electric vehicles are compared to a natural gasoline vehicle in the Wasatch Front. As was mentioned earlier, the mobile emissions from vehicles in the area, over 50 percent of those emissions are coming from--50 percent of total emissions are coming from mobile sources, so vehicles are a really important factor to look at when trying to clean up the air in the area.

So for analysis, we used something called the Greek model developed by the Argonne National Laboratory that looks at lifecycle emissions, all the upstream emissions that are in--from a vehicle and transportation and to really try to better understand what emissions are specifically going to contribute to the air problems in the Wasatch Front.

So the analysis that we did shows that in all the--in the areas which are, essentially, all the Salt Lake Counties and surrounding counties, all types of electric vehicles reduce

emissions of the criteria pollutants compared to a comparable gasoline vehicle. So a full electric vehicle like the Nissan Leaf, it only runs on electricity has to have the greatest scope and the greatest amount of emission reductions. And then the kind of plug in hydroelectric vehicles, like the Chevy Volte or the 2G Prius, has a lower level of reductions but still have reductions compared to a gasoline vehicle.

And in my original comments, there's a figure on page 11 that I will kind of just refer to here that just kind of outlines the emission reductions we found. The largest emission reductions for a pure electric vehicle is--99 percent of emissions are reduced compared to gasoline vehicles for the criteria pollutants volatile organic compounds and carbon monoxide, with significant additional reductions in sulfur dioxide of 96 percent, nitrogen oxides, 76 percent, and particulate matter, which I think is a very great concern for the Wasatch front because of the wintertime inversions, 65 percent of PM-2.5 is reduced by electric vehicle, and 49 percent of PM-10. So I think our analysis shows that electric vehicles do have a clear emissions benefit compared to a new gasoline vehicle and can play a really important role in helping clean up the air in the Wasatch Front.

I want to also briefly focus on economic benefits as
I think other speakers have spoken to. Electric vehicles really
do save drivers money. Today if you are driving an electric

vehicle, you are paying the equivalent of about 95ó per gallon, which is obviously very competitive with gasoline prices.

And then again, on page 13 of the reply comment we submitted--actually, that is page 13 of our regular comment, I apologize. We had someone outline some of the economic benefits. An electric vehicle driver can expect to save between \$1,000 and \$2,000 annually on fuel costs; lifetime savings for the whole vehicle can be \$11,000 and \$24,000 and then depending on the rate of adoption for electric vehicles, we calculated that the total economic benefits for the whole State of Utah's energy fuel cost, \$64 million and \$280 million by 2030.

So Utah, again, the one kind of energy source that it has to import is oil, so it imports just about half of its oil from outside of the State. So shifting our transportation sector over to electricity, which is something we have lot of, there are lot of coal and natural gas and potential for renewable in Utah, any time you can shift to electricity sources for our transportation sector, again, we are spending money that is going to stay much more in Utah's economy, rather than going outside of the State and outside of the country and, you know, help Utah become more energy independent.

One area I also want to touch on is the potential
Tier 3 emission standards, which the Federal Environmental
Protection Agency has proposed these Tier 3 emission
standards for gas and light-duty vehicles. And if implemented,

they will significantly reduce sulfur content of gasoline and will reduce tailpipe emission and really will play a really important role in improving air quality in the Wasatch Front.

But I do want to caution that is not really going to be a perfect cure all, because even if these Tier 3 emission standards go into effect, there will still be benefits, additional benefits from electric vehicles. Some of those include like I mentioned, sulfur dioxide, carbon monoxide, volatile organic compounds, electric vehicles will still offer emission advantages in those pollutants.

And then over the long term with electric vehicles, as they--hopefully, as if that grid does transition toward more renewable electricity sources, then you really start getting into a zero emission vehicle. And, in addition, the Tier 3 standards, if they do go into affect, they will be phased in between 2017 and 2025, so that is going to be a pretty long time to wait to start seeing emission reductions from the Tier 3 standards.

So briefly, based on some of the benefits I have outlined, we wanted to just recommend the Commission consider several key policies in their investigation to improve air quality through alternative fuels, and I just want to briefly highlight three of the policies we mentioned in our comments.

As other people mentioned today, the idea of bringing parity to the tax credit between electric vehicles and natural gas vehicles. I think that is a reasonable thing to do,

based on both vehicles providing significant emission reductions. And so because there is that higher upfront cost with electric vehicles, we would like to see that removed as a barrier and that will help encourage more adoption by consumers.

And another important element that we would like to see in that is that the tax credit could also be applied to vehicles that are leased. A lot of electric vehicles are, in Utah and others across the country, people are leasing them. The manufacturers are offering very competitive, attractive leasing offers, making sure that if you do lease a vehicle, you can still be eligible to receive the benefits of that tax credit and we have some examples of that in our reply comments, on page 4.

And then we would be interested in seeing the Commission looking at crediting an electricity rate tariff for electric vehicles that is unconnected to time of day tariff that is not connected to the current tier rates, so it will not penalize electric vehicle households for their higher use of electricity compared to a non electric vehicle household.

Then finally to promote the provision of charging stations by the public sector. We would like to see--look into having charging station owners be able to resale electricity to electric vehicle drivers, to give business owners the selectability to find a business model that works for them and their EV customers. And we have examples of all of these policies listed

1 in our reply comments, and that is my testimony today, and I 2 really appreciate your taking the time to hear it. Thank you. COMMISSIONER CLARK: Thank you, Mr. 3 4 Salisbury. Is there any cross? Chairman Allen. 5 CHAIRMAN ALLEN: Thank you, Commissioner 6 Clark. Mr. Salisbury, I realize the focus of your testimony, both 7 prefiled and what you've provided today, has to do with 8 electricity vehicle, or EVs as we call them, but I am curious, one 9 third of this legislation that brought us all here today talks about 10 natural gas infrastructure. Are you personally--since you deal 11 with transportation at SWEEP, are you personally familiar with 12 how much cleaner natural gas vehicles are than gasoline or 13 clean diesel vehicles? 14 MR. SALISBURY: I am. 15 CHAIRMAN ALLEN: Have you had any exposure to 16 that in your research? 17 MR. SALISBURY: Yes. I actually didn't talk about 18 it in my oral comments today but in my--let me get on our 19 original comments that we submitted, we do include CNG 20 vehicles in the comparison with gasoline and electric vehicles, 21 so I think you can get a pretty good picture. 22 The way it kind of pans out, kind of a short answer, 23 is that a CNG vehicle still has a lot of emission advantages 24 compare to a gasoline vehicle, comparing it to--we compared 25 the full electric vehicle and then two different plug-in hybrids,

1	like the Volt which goes about 40 miles on a battery and the
2	plug-in Prius that goes about 10 miles on a battery. So we
3	compared all these five types.
4	And so the CNG vehicle, its emission benefits tend
5	to fallso the electric vehicle tend to have the most emission
6	benefits for the Wasatch Front, followed by the CNG vehicle,
7	followed by the Chevy Volt and then the Prius plug-in, but all
8	four of those alternative vehicles do have reduced emissions
9	compared to a gasoline vehicle.
10	CHAIRMAN ALLEN: Okay, great. I saw that in your
11	testimony. I appreciate the summary, so thank you.
12	COMMISSIONER CLARK: Thank you, Mr.
13	Salisbury, you are excused. Mr. Pacenza, and you have a
14	power point presentation?
15	MR. PACENZA: That's correct.
16	COMMISSIONER CLARK: Do you need a little
17	time?
18	MR. PACENZA: I don't think it will take very long,
19	maybe just a minute or so, and I do have printed copies, as
20	well.
21	COMMISSIONER CLARK: Okay.
22	(A discussion was held off the record.)
23	COMMISSIONER CLARK: Back on the record. Mr.
24	Pacenza, do you desire to provide sworn testimony?
25	MR. PACENZA: Sure, yes.

1	COMMISSIONER CLARK: Please raise your hand.
2	MATT PACENZA, called as a witness and having
3	been duly sworn, was examined and testified as follows:
4	COMMISSIONER CLARK: Thank you, please be
5	seated. State your full name for the record and spell it, and
6	then describe your affiliations that bring you before us today.
7	MR. PACENZA: Sure thing. So my name is Matt
8	Pacenza. I am the policy director for Heal Utah. Pacenza is
9	P-A-C-E-N-Z-A.
10	Heal Utah is a local nonprofit environmental
11	organization thatour mission is to work to protect public health
12	in the environment of Utah from various threats. And in recent
13	years, that has led us more to clean air issues and, specifically,
14	we have been zeroing in more than anything on the
15	transportation sector. So that, of course, led us to the strong
16	interest in alternative fuel vehicles.
17	COMMISSIONER CLARK: You filed comments in
18	advance of this hearing, I believe?
19	MR. PACENZA: That's correct, initial comments,
20	reply comments.
21	COMMISSIONER CLARK: And do you intend those
22	to be part of your sworn testimony today?
23	MR. PACENZA: Yes, sir.
24	COMMISSIONER CLARK: Thank you, please
25	proceed.

MR. PACENZA: Thank you. Much of what of--or at least the piece that's in this brief presentation, both Mr. Larsen and Mr. Salisbury and others as well, Ms. Beck, have already enunciated, so I will move fairly quickly. But a few pieces I think have not yet been addressed and so I will spend a bit more time on those. We will not spend too much time. I want to make sure other folks get a chance, as well.

So I think one of the areas of some disagreements among the various commenters has been the degree to which you know this bill was intended to approach to apply just to CNGs or other vehicles as well, and this just sort of briefly puts the statutory language from the bill itself up there. And, of course, it does use the language alternative fuel vehicles and those words have a very precise meaning when used to address this sector.

And I think, primarily, we look to the federal government on this front which, you know, has a well-developed alternative fuel vehicle, sort of, center and website and issues, the whole series of programs and rules and incentives. And I took a little screen shot of that page that the web addresses at the bottom there, and we can see that, you know, they account for six categories of vehicles within their--of course, CNG is part of it, as it propane, and we have biodiesel methanol, and hydrogen is still a little more exploratory and is still in the drawing board stage, but, lastly, electric. So all those are

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considered part of this group of these alternative fuel vehicles by the federal government.

So let's move now to talk briefly about buses. I think buses are a lot of the focus of this. Buses are, you know, both within from school districts and entities like UTA, the transition from older diesel vehicles to CNGs has been one of their principal clean air moves, and I think that supporting that transition is part of what's contemplated both by the legislature and, perhaps, by the Commission and panel.

So I wanted to just quickly speak about that, and I was thrilled to run across this report that I noticed that the gentleman from Questar used as well. And it a report which was prepared by a well-established and reputable energy consultant called MJ Bradley, and they prepared it for entity call The Clean Air Task Force, which is national organization which represents various folk working on these issues. And they did exactly the kind of analysis that I think is valuable for this body, which is to compare two sort of very practical ways to try to, you know, clean up our bus fleets, and those are clean diesel and CNGs, and that they went there all kinds of things from money to air quality to climate change impact, as well.

What I think I sort of learned and hadn't really fully appreciated was the degree to which new diesel, cleaner diesel, and the new technologies that have come along with them have really been, you know, to use a cliche, sort of a game changer

in the world of large vehicles and air quality. The rules that I think were finalized in '01, went into effect I believe in '05 or '06, the technology in the vehicles are still coming into effect, but the cut and the sulfur content and fuels is rather extraordinary, from 500 parts per million to fifteen parts per million.

So when you buy diesel fuel today, ultra-low sulfur diesel, you are buying a dramatically cleaner fuel, and the impacts on emissions are there. And then, of course, there's technology that's within the vehicle, as well, that takes advantage of that lower sulfur fuel, catalytic converters and the like. And the result is fairly staggering.

So if you look at, if you but a new diesel bus today and you compare that to an aging diesel bus--and these data again is from the MJ Bradley report--we see cuts, you know depending on the particular pollutant, whether it's nox, or a particulate matter or hydrocarbon, you know, that range from 89 to 98 percent, so it's a dramatic improvement. You can buy a new diesel bus and replace the dirty old diesel bus, you are doing some good for sure.

So let's compare those to CNGs, another very popular common clean air vehicle on the market now. I think it's safe to say, and the MJ Bradley does a very thorough job so I don't want to waste my time going over every single thing, but the emission profiles, I think, are broadly similar; that diesel is

better than some, CNGs are better than others, you know sort of depends on, perhaps, your particular local pollution mix. But it's fair to say that they both are much cleaner and they have some modest advantages. Diesel's a little better on nox and CNG is a little better on particulate matter and hydrocarbon. CNGs also swept it better in climate gasses, and as in Mr. Salisbury's conversation and so as it has already come up, and it of course does depend upon where your local mix of fuel might come from.

Now the big advantage of clean diesels is costs, that when you buy a clean diesel bus, that it's about \$70,000 less than a CNG bus, and it seems like from various news articles and this report itself, the difference I believe is somewhere in the high \$300,000 for a clean diesel and it's sort of mid to upper 400's for CNGs. I think UTA was quoted in a Tribune story earlier this year saying 460, so, 460, roughly, for a CNG and the high 300's for a clean diesel.

The other obvious advantage for clean diesels is they don't require costly fueling infrastructure. UTA and school districts around the State because they put diesel to a bus right now, so that doesn't require any dramatic additional funding. The significant financial advantage of the CNGs buses is their annual fuel costs are much cheaper, and they are particularly so in Utah because we have low CNG fueling cost things in part to subsidies. So, you know, those are sort of how it weighs. You

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are going to spend a lot of money up front for CNGs, but over time, that will slowly pay itself back.

And so I think you can make the argument that if you are an entity considering, you know, you want to sort of cleanup, to green your vehicle fleet, you know, I think that the choice between these two is not 100 percent clear and it might depend on your priority; are you more interested in saving money and operating costs year to year or are you most interested in maximizing the impact of your capital costs up front in purchasing the buses. I think all of those sort of would go into that decision making.

I think our prospective when we take a step back is to say, you know, we are not wedded to any particularly fuel or the other but it seems to us the number one priority should be getting as many older buses off the road as possible. You know, the older vehicles are--is significant portion of this number that has been going around already, 50, 55, 57 percent of the transportation sector contribution to our--the dirty air problem. So, you know, if with we can get 12 buses off the road instead of ten, that is great, and that was kind of the conclusion that the MJ Bradley report released, as well.

I certainly won't read this entire quote, but they make the point that if your have a limited amount of capital money, which, of course, the vast--pretty much every entity will, then you can buy more of those diesel buses up front than the

CNGs, and, of course, your infrastructure is cheaper, and you're able to get more of those dirtier buses off the road. And, thus, over time, simply by having pulled off more of those dirtier buses off the road, you are likely to see bigger cuts in emissions from your overall fleet than you would have if you would have gone with CNGs.

Now as I said before, it's safe to safe, each entity has the balance of series of different priorities, but it's certainly not crystal clear that CNG buses are the best clean air investment. I think that MJ Bradley report does a terrific job of laying that out there.

The next area I think that has been covered pretty good but I will move quickly, but that is consumer vehicles, to move away from fleet to consumers, and I think that the message we have gotten from others, and I will quickly reiterate, is that electrics are sort of already more successful in the marketplace despite the fact that they have barely been in the market for a year or two, and that they have clear advantages over CNGs. Despite that, Utah has given much more support to CNGs than electrics over the past, you know, decade.

Mr. Larsen, I think, covered this well. EVs are certainly cleaner and they are even more cleaner if your particular area of concern is localized air pollution. If your particular area of concern is climate change, it becomes a trickier calculation. But if we are concerned about Wasatch

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Front air pollution, then certainly EVs are a better choice. They, obviously, require much less fueling infrastructure.

One thing I hadn't realized until I had friends that owned vehicles is that you can install these costlier charging stations, you know, the electric we have in our home is 110, you have to get 240, you can install for few thousand dollars these rapid chargers. The DC-1 I think would cost \$30, \$40,000 and charge you much quicker, but the truth is, the vast majority of drivers can simply do it at home at night.

If you are home for eight, nine, ten hours, and we are pretty much all are, then you plug that thing in out of a plug already in your home, no additional investment. That car will charge up plenty for your next day's driving. So that's been a lesson I've learned from just friends that have them; that these charging stations are important and they do make sense, but for most drivers and most trips, home normal plug, no problem. And, of course, even those rapid charging stations, which we're beginning to see are, roughly, I think 1/20th of the cost of a CNG fuelling stations, so you know, EVs, those are certainly much cheaper.

You know, CNGs in terms of the consumer vehicle market that folks are buying day-to-day have not been all that successful. Last year, there were 14.5 million cars and trucks sold, a little over 20,000 were the Honda, and the trucks, you can buy some heavier-duty trucks. EVs are just about a year

and half in the marketplace now and we are up to about 7,000 a month, so for this year, they are projecting it will end up at about 100,000 by year's end. So just in their very initial foray into the market, you know, we are seeing considerable more than the CNG consumer market.

You know, the No. 1 concern about EVs, I suppose other than cost, is the concern you have any time you're the first person to buy something new and strange, is this range of anxiety and I think consumers are discovering that you know the way to think of your EV is as your first vehicle, your day-to-day car, your go to work, drop off the kid, go shopping car.

Then pretty much the vast majority of American households have that second car, so you want to take that trip to Moab, you want to go up into the Uintah's for a few days, you want to go visit your family in Idaho, you know, you are probably going to have that Subaru Forrester or Chevy truck or whatever it might be, but you don't have to worry about filling up. You just fill up at whatever gas station you come to along the way. But most of us, day to day is driving a fairly modest amount, and for those, you know, the home charged EVs, it can be pretty great. So that range in anxiety seems to be fading as the big issue.

So very quickly, the last thing is just to look at how our State does supporting these two classes of vehicles. And even prior to the passage of this bill, you know, we've already had one of most developing CNG fueling infrastructures in the

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24 25 nation and we've seen some slides from the gentleman that testified already.

And this map is not the easier map to look at, but, basically, New York, Oklahoma, and Utah are the second best in terms of numbers of stations, then California is the best. So we are right up there at the top when it comes to a robust and healthy CNG fueling infrastructure.

On the other hand, when we look at the charging infrastructure for EVs, we do lag, and I hate the color coding on this thing because it's not remotely intuitive, but the yellow, which Utah is the one of the lower proportions; only a couple of states are--maybe six or eight states have worse than that, then quite a few states have a lot more, so we do lag comparatively in terms of charging infrastructures.

So just quickly in conclusion, you know, we basically wanted to make the point that when it comes to consumer vehicles, it does seem like EVs are a superior air quality investment that--and even in fleet vehicles, we have--CNGs have tended to be more successful. There are alternatives that do need to be studied if we are really going to, you know, start from the point that we have rare and precious public dollars to invest in these things. We know there are so many priorities in this State that need to be addressed and air quality is just one of them. And there is not an overwhelming amount of money, and so if we are going to put these few

1	precious dollars into solutions, we need to make sure we get the
2	best bang for the buck. Thank you.
3	COMMISSIONER CLARK: Cross-examination for
4	Mr. Pacenza? Yes, a question. Please identify yourself for the
5	record.
6	MR. HUGIE: Yes, Kim Hugie from CNG America.
7	On that last charging unit, how fast have you charged an electric
8	vehicle?
9	MR. PACENZA: Yes, so my understanding is the
10	full charge would be up to a half hour, but most people wouldn't
11	pull into a said station at zero percent. They are likely to pull in
12	at 10, 20, 30, 40 percent. So it's likely that the vast majority of
13	people that would use a fast charging station would get
14	everything they would need in 15 minutes, let's say.
15	And then you can even imagine a scenario where if
16	you're just a few miles short of where you need to go, it could
17	literally be just a few minutes, it could function just like a gas
18	station does now; if you just need that extra ten percent of your
19	battery charged, you know, you go into the store and use the
20	restroom and by yourself a diet soda, come out, and you have
21	gotten your ten miles or whatever you needed.
22	MR. HUGIE: How much space does a charging unit
23	like that take?
24	MR. PACENZA: You know, I am not sure about
25	that. Mr. Larsen might know, or other folks who study that a

1	little more. I've seen at the Nissan dealership, they pointed out
2	where they wanted to install one. It certainly wasn't a giant bay
3	or anything. It was along the side of the dealership, so I don't
4	think they are immense.
5	MR. HUGIE: And then my final comment, on your
6	slide you show that \$2,500 rebate. It's actually a tax credit.
7	MR. PACENZA: Yes, I apologize. Of course it is a
8	tax credit, sorry.
9	COMMISSIONER CLARK: Thank you. Any other
10	questions? Yes?
11	MR. NORTON: A couple questions; one, first
12	question would be, you did an analysis of federal incentives for
13	EV compared to gas.
14	COMMISSIONER CLARK: Would you please
15	identify yourself?
16	MR. NORTON: Merritt Norton, BLU.
17	MR. PACENZA: Yes, so it is true that we currently,
18	as of right now, have a \$7,500 federal rebate for electric
19	vehicles, which has definitely gone a long ways toward getting
20	the first early adopters on the market. It is due to expire, I am
21	pretty sure, at the of 2013, and so there is no, you know,
22	certainty that that will continue. Certainly by the next legislative
23	session when there will be bills introduced to bring these tax
24	credits into parody, we would know whether the federal one
25	would be extended or not.

1	CNG vehicles did have federal rebates, as well,
2	during their earlier years, as did, by the way, hybrid vehicles,
3	but those, I believe and please correct me in the audience if I
4	am wrong, those have lapsed of the number of years the
5	vehicles were on the market. So there's been a tendency for
6	the federal government to support these vehicles in the first few
7	years to get, you know, a small number of them on the road for
8	folks to see they work and that they are successful, and that
9	over time as more of them are produced, those rebates go away.
10	So we have no way of knowing whether the EV rebate will stick
11	after the end of 2013 or go away, but we will know by the next
12	legislative session falls around.
13	MR. NORTON: The next question to that, have you
14	done any study on what the CNG market would look like if CNG
15	vehicles had a \$7,500 rebate?
16	MR. PACENZA: No, that would be beyond,
17	certainly, our purview. So I don't know what that rebate was in
18	the first few years, so I am not sure what it was.
19	MR. LARSEN: It was \$4,000.
20	MR. PACENZA: So \$4,000.
21	MR. NORTON: My final comment, have you done
22	any analysis of what the potential, the future potential, for large
23	future reductions in emissions in the future, are comparing clean
24	diesel to natural gas? What the future potential and-

MR. PACENZA: I'm not sure I understand the

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1	question. There is an implication that CNG will get cheaper,
2	too. Is thatthere's an implication, like I said, that CNGs will go
3	through some—
4	MR NORTON: Yes.
5	MR. PACENZA: I apologize, I am not aware of that.
6	COMMISSIONER CLARK: Any other questions?
7	Thank you, Mr. Pacenza. I think that concludes the PowerPoint
8	presentations, at least those that we are aware of. Are there
9	any other participants today who need audio-visual equipment?
10	Okay. According to my list then, we are next to hear from
11	Spencer Richley. Do you desire to offer sworn testimony?
12	MR. RICHLEY: Yes, I do.
13	COMMISSIONER CLARK: Please raise your right
14	hand.
15	SPENCER RICHLEY, called as a witness and
16	having been duly sworn, was examined and testified as follows:
17	COMMISSIONER CLARK: Please be seated and
18	state and spell your full name for the record, and indicate your
19	organization you represent.
20	MR. RICHLEY: My name is Spencer Richley,
21	S-P-E-N-C-E-R, R-I-C-H-L-E-Y, and I am with Clean Energy.
22	And Clean Energy also submitted initial comments, as well as
23	reply comments, and we would like those to be part of the
24	testimony, as well.
25	COMMISSIONER CLARK: They will be considered

1 sworn testimony as though you had offered them today. 2 MR. RICHLEY: Great, thank you. COMMISSIONER CLARK: Thank you. Please 3 4 proceed. 5 MR. RICHLY: Thanks. So Clean Energy is North 6 America's leading provider of natural gas as vehicle fuel, so we 7 build natural gas stations, and we do both compressed natural 8 gas as well as liquified natural gas. We operate in 42 of the 9 lower 48 states and we fuel over 28, 000 vehicles at about 450 10 of our station locations across the country. 11 And we have two main issues with S.P. 275, as well 12 as with the general concept of having utilities participate in the 13 natural gas refuelling market. Those two issues, and their are 14 tied together closely, is the fact that ratepayer funding is 15 allowed to be used in a private market, as well as 16 anticompetitive concerns as a result of that. 17 Utilities inherently are a monopoly. They were 18 designed to be a monopoly so that there aren't multiple gas 19 lines running through residencies, but the problem is when you 20 apply that then over to the private market, there are a lot of 21 issues and concerns on the anticompetitive aspect of it. Some 22 of those monopoly powers include a lower cost per capital to 23 build stations, simply because you have a rate base backing them, and we simply can't build stations at that low cost of 24

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capital that they can.

They have customer database and accounts already. They have a wide, large database of their current customers that they can then reach out to for these CNG services, as well, that we simply don't have access to. They have cross-subsidies of their sales force, as well as their public policy team; although some State funding might be used to build the actual stations, there's also ratepayer dollars that are currently being used for their sales team and public policy team that would then be transferred over for the CNG services, as well as marketing cost and bill stuffers.

They also have brand equity in a very young market. If you live in Utah, you probably have heard of Questar Gas. You probably--you may not have heard of companies like Clean Energy or Blu, even though we are some of the largest companies in the market.

And then, lastly, their function as a gatekeeper to the pipeline, and this is an important aspect because they do control the pipelines. If, say, Clean Energy, or another private firm were to do marketing, build a relationship with a customer, convince the customer that CNG would be a good idea, in order to give that customer a quote for their station, we would have to go to Questar first to get the pressure in the gas line to figure out our compression services. At that time, Questar would have the opportunity to then go around Clean Energy and directly to the customer and say, "You know, I hear you are interested in

the CNG services. Did you know we also provide the same service and we can do so at a lower cost per capital." So we are also afraid of having our customers, essentially, be poached.

Clean Energy and other private firms must use shareholder dollars and we must make sure we have a sufficient number of customers before we can build a station; whereas a utility like Questar is guaranteed to make a profit on their station, regardless of whether they have any vehicles at all. They can make a profit simply from their rate base, based on their approved rate of return.

Because of that, Clean Energy, although we are the largest vehicle fuel provider in North America, we have zero CNG stations in Utah; simply because we just can't compete with Questar. They have about 30 stations in Utah. We do have one LNG station currently in Utah and that's simply because Questar doesn't currently provide LNG services. So we do feel that Questar should be allowed to build a station on their own property to fuel their own fleet. We have no problem with that and we think that is the correct role for the utility. That station can even be open to the public. That is fine, as well, because that does provide a public benefit.

A good model market to look at is California. That market has been exemplified in past presentations today of how robust it is. There are about, roughly, 600 stations, both public

and private, CNG and LNG. It is the largest market in the country and utilities are not allowed to participate in that market to directly compete. As I mentioned before, they can fuel their own fleet on their own property and open that up to the public but they cannot build stations on property outside of that.

So the notion that the utility must get involved in the market to--in order for the market to grow is just simply not true. The problem is not the stations. It's the vehicles. As Merritt, from BLU, mentioned, as long as you have vehicles, you can build a station, and that's a correct model because that station will then be sustainable, rather than simply putting a station out there and hoping that vehicles will come. So if there is funding available, it should go to vehicles, not the stations.

An example of a few things that the utilities can do to help grow the market are things like home refueling; having a refueling service in your garage; offer to finance home refueling appliances for residential customers for a limited time periods to help develop the home fueling market; just simply customer information and education is important because is alternative new fuel, just getting people comfortable with the idea of natural gas for vehicles; and then expanding their own fleets to natural gas, as well.

So the ultimate goal here, I think, with S.P. 275 is to expand the alternative for fueling market and clean up Utah's air. And as can be demonstrated from California, utility

1	involvement will simply stifle the healthy growth of the market.
2	If we want to help a healthy market, it should be with private
3	capital. I don't understand why we would use public ratepayer
4	dollars when there are private companies willing and able to
5	provide private capital to build stations.
6	So that concludes my testimony and I am open to
7	further questions.
8	COMMISSIONER CLARK: Thank you. Are there
9	questions for Mr. Richley?
10	MR. HUGIE: What is the average cost of your
11	CNGs in California?
12	MR. RICHLEY: The actual price of the gas?
13	MR. HUGIE: Yes.
14	MR. RICHLEY: I am not sure the exact number. I
15	believe it's around \$2.30 per GGE, gasoline gallon equivalent.
16	COMMISSIONER CLARK: Thank you. Any other
17	questions? All right, you are excused. Thank you very much.
18	We have been going over an hour. We will be off
19	the record and in recess for ten minutes.
20	(Whereupon, a break was taken.)
21	COMMISSIONER CLARK: We will be on the record,
22	thank you. We will next hear from Kim Hugie. While he is
23	coming forward, I want to express again the Commission's
24	appreciation for all who are presenting information today. If any
25	are here that intended to be part of the public witness hearing

1	tomorrow and desire instead to offer their statement to the
2	Commission today, you can certainly avail yourselves of that
3	opportunity. We will convene again tomorrow at 1:00 in the
4	event there are people who intend to only participate in that
5	session of our hearing.
6	Let me also remind you that we appreciate your
7	presentations. If you would like to summarize the comments
8	you have made, we find those summaries helpful. It isn't
9	necessary to repeat information that we have already received
10	in the record from other parties, so if you would have that in
11	mind as you make your statements.
12	And, Mr. Hugie, do you desire to present sworn
13	testimony to the Commission today?
14	MR. HUGIE: Yes, I do.
15	COMMISSIONER CLARK: Would you please stand
16	and raise your right hand?
17	KIM HUGIE, called as a witness and having been
18	duly sworn, was examined and testified as follows:
19	COMMISSIONER CLARK: Please be seated. State
20	and spell your name for the record and identify any organization
21	or affiliation that you have that cause you to be here today.
22	MR. HUGIE: Okay. I also have some written
23	comments that I would like to be put on the record for
24	testimony.
25	COMMISSIONER CLARK: And those have not yet

1 been filed?

MR. HUGIE: They have been, yes.

COMMISSIONER CLARK: Okay. So we will consider those to have been made as sworn testimony today and you will be subject to questions about them from others.

MR. HUGIE: Okay. My name is Kim Hugie. I am a small business owner. I own a Company named CNG America.

I have--my business model is a little different than some of the others but my business model's actually been to the public vehicles more so than fleet and the bigger vehicles like, you know, Clean Energy and Blu. So I am more at a compressed natural gas and the LNG is more for the big semis and the bigger trucks. And then they also, I think, do some CNG, too, but just so you know the kind of difference. My model is a little different.

I have four stations right now along the Wasatch Front located all along I-15. Clearfield, JP Chevron up at a truck stop up in Tremonton, one down in Lehi, and then the newest one, I am just opening up the end of this month, that will be in downtown Salt Lake at 9th South and West Temple. And I am working on another one down in Provo next spring and I am in negotiations to do a station in Park City also for next year, so I'm the little guy here.

Like I say I am really standing up for the public and the cheaper fuel. I think what I wanted to really say, and I am

going to try not what to repeat what everybody else said, I concur what Blu said and clean energy. I think that Senate Bill 275, in giving Questar that extra advantage of that \$5 million a year for infrastructure, creates an unlevel field for competition and free enterprise. And I think that money, I think the State's intention may have been good in this bill but I think it should go a different direction. That money should be--instead of used for infrastructure, should be used to help to subsidize conversion and the purchase of CNG vehicles, and probably along with that, probably even with the electric vehicles. They help with that, too, and help that to grow.

My personal feelings because I have studied both of them, and I disagree with some of the professor's comments but I agree with some of them, also, but I think electric cars is probably the future in the long term, but I think the CNG is the bridge for right now. I agree with what some of the others have said about the infrastructure that we have right now. Most of my stations are operating at less than 50 percent capacity, so what we need is really not right now so many new stations. There are a few pockets, like Park City and a couple others where they don't have any, but for the most part, the public has access to a station within, you know, 50 miles of their home. So it's pretty convenient for them right now.

The real help is in getting the conversions and getting the vehicles out there and the public needs help with

that. Yesterday, I decided to go to my Lehi station and do a poll and spent more than half the day there talking to my customers. And I also talked to the Division of Air Quality with the State and talked to a person there, Matt Carlisle, who is over giving the--approving the tax credits for the vehicles.

And it's just kind of interesting that he-- and if I can read these stats to you that he gave me. In 2008, there was 1,429 vehicles that received a tax credit. And keep in mind, in 2008, that is when gas prices went all the way up to \$3.75, where they are now. We have gotten use to the price. And CNG was at 676. Huge differential and people were looking for an alternative. But in that year, 78 percent of them were vehicles that were six years old or older. What the people are doing is they are going out and buying these used government vehicles, bringing them to Utah, and taking the tax credit and driving them.

And in 2009, there were only 359 vehicles that took the tax credit, not that many. And 81 percent of those was six years old or older. Again, it's the people going out of state, buying the older vehicles, and bringing them here. In 2010, similar type thing, 420, and 84 percent of them were over six years old. In 2011, 410, and 85 percent of those were over six years old. And, in 2012, the number went down a little bit to 400, and 78 percent of those are six years or older.

My point is that people are buying these older

vehicles that the government--or that GM and Ford stopped building in 2005, and there's only--like they say, Honda Civic is the only one being made right now, the only other option these people have. And all of them that I interviewed with yesterday, every one of them said they want to go CNG again if they can afford it.

The problem is the cost of conversion. It costs-and this is a good price, but for a truck right now, we convert it for \$5,500. It takes a long time to pay that back. With a tax credit of \$2,500, that helps, but according to Mitt Romney, only 47 percent of the people can really take advantage of that tax credit. It's not helping the other 49 percent. And I can tell you, the people at this station is probably--are most of them are that 47 percent. These are people that are struggling to make payments. It's companies that are buying these fleet trucks to operate their landscape businesses and they are doing everything they can to save money. And for the most part, I have talked to them, how much money are you saving, and the average came out to about \$250 a month per vehicle in fuel.

And I ran the numbers really quickly, and maybe this is a pie in the sky stuff. If I can find my numbers here, but if only--I think I can remember the numbers; if only ten percent of the vehicles in Utah went to natural gas, ten percent of what I have been told, there is a little over a million registered vehicles in the State, if they are saving \$250--ten percent of those, that

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is \$100,000, and if it's \$250 saved, it came to \$25 million a month being saved in the State of Utah for people going to natural gas. And you can multiply that by 12 and find out what the annual savings is, and it's getting close to \$500 million a year.

You know what those people are going to do on that money is spend it on other things, so that is money going right back into Utah's economy. So not only is it helping these people but helping Utah's economy and it's helping with jobs, people like me that's putting in the natural gas stations, the people doing the conversions, and people with Questar that is involved in the mining and stuff like that. So it is all good that way for the economy.

I think I want to just probably--I don't want to repeat what everybody else has said but I just want to summarize. You said the summary is really important to you. I think that that \$5 million instead of being used for infrastructure, and I am in infrastructure, should be used for to help subsidize the conversion of vehicles to natural gas, and also the purchase of new vehicles, whether it's natural gas or electric. It needs to start there. As the demand increases, businesses like me will put in the stations as that demand increases. I don't think Questar really needs to be subsidized for any more stations at this point.

I do want to give them credit. Questar, for me, I

1	am competition to them, but I that been very helpful to me and
2	in me putting my stations in and providing me technical
3	information when I needed it and also advice at times when I
4	have asked for it. So they have got it started and you have to
5	give them credit to them for that, but I think we're at the point
6	now that the subsidy should end.
7	I was told in one meeting, I was told here that they
8	are going to cost of service for their fuel, which is right now,
9	they are selling fuel for \$1.56. Their actual cost of service is
10	\$1.68, and I know they want to move toward that direction of
11	getting the full cost of service, and I hope that the Public
12	Service Commission will allow that, to get the cost of service to
13	make it a more level field for private companies like mine to get
14	into the field.
15	And I am willing to answer any questions you might
16	have.
17	COMMISSIONER CLARK: Thank you. Is there
18	cross-examination for Mr. Hugie? Thank you, Mr. Hugie, you
19	are excused. I appreciate your presentation.
20	Carl Clark? Mr. Clark, do you desire to present
21	sworn testimony?
22	MR. CLARK: Yes.
23	CARL CLARK, called as a witness and having been
24	duly sworn, was examined and testified as follows:
25	COMMISSIONER CLARK: Please be seated and

1	state and spell your name for the record and provide your any
2	organization that you are with.
3	MR. CLARK: My name is Carl Clark, C-A-R-L,
4	C-L-A-R-K. I am presently the president of the Electric Car
5	Company, which is a small local company here in Midvale.
6	COMMISSIONER CLARK: Thank you. And I don't
7	believe you've provided written comments?
8	MR. CLARK: I did not. It is just extemporaneous
9	there.
10	COMMISSIONER CLARK: Please proceed.
11	MR. CLARK: Back in the early '60's, I was elected
12	to the state senate here in Utah. I was 31 years old and I am
13	thrilled to be here today because in those days, this building
14	wasn't even built, and I am seeing things around me, especially
15	in the presenters that have given their testimony today and
16	what's happening in this marketplace.
17	I should be retired because I am almost 80 but I am
18	involved in some things that I think are very exciting and I would
19	like to tell you about how that relates to what we are doing here
20	today. When I was in the senate, the president of the senate
21	came to me and he said, "I would like you to write the first air
22	pollution bill for the State of Utah."
23	I knew absolutely nothing about the subject. And I
24	went to California where they were way ahead of us and I got a
25	lot of information. And I worked with a legislative analyst called

Carl Snow and we together put together the first air pollution bill for the State of Utah. And I have become interested in the different aspects of air quality that we have in this State, and, subsequently, after I left the senate, I started a business called PCI, which stood for Propane Corporation, Incorporated, and I started teaching people and furnishing them with equipment to convert their vehicle to run on propane, a liquid fuel.

Some time after we got into the business, the Canadian government asked us if we would teach people up there how to convert vehicles to run on natural gas and we got involved in converting vehicles to natural gas up in Canada. I personally sold and helped install the first 30 vehicles on compressed natural gas here in the State of Utah and I helped--I sold the first three compressor stations and helped install those compressor stations here in Salt Lake City for--with Mountain Fuel. Subsequently, I have over 300 conversions to natural gas under my belt going into the early '80's. We even have converted an engine to run on meth--hydrogen.

Compressed natural gas, everybody--they use the term natural gas and CNG, but in the early years, it was a tough problem. The first thing that we had to surmount was where do you get the fuel from, and then it has to be compressed, and I think they're still compressing it about these pressures. They compress gas to 3,600 pounds per square inch. That is the same pressure that comes out of muzzle velocity of a

high-powered rifle, and takes quite a lot of energy to get that gas compressed up to 3,600 pounds. And then there's LNG, which also takings a lot of energy to get it down to the sub--way, way below the 200 degree minus Fahrenheit to make it into a liquified natural gas, anyway, the result of all of this is I eventually decided--that was in the days when gasoline cost \$1.50 a gallon, and gas prices went down, and I elected to go out of the compressed natural gas business.

The reasons behind my going out of it is because as a small business, I didn't think I could stand the liability if there was a natural gas accident and some children was burned or some other catastrophe happened as a result of these conversions we were doing. So I got out of the business and I went into the business of making generators that operate on natural gas as a clean fuel.

I did that for almost 30 years until, approximately, seven years ago, I went to see the movie, "Who killed the electric car," and I was appalled at the fact that General Motors apparently was colluding with gas--with big oil companies to keep electric cars off the market. So I started a business called the Electric Car Company in Salt Lake City.

Now I really like natural gas. It's a great fuel.

Compressed natural gas has got a lot of places that it could be used, and I am not particularly speaking against natural gas today, but I am here to talk to you about the advantages of

electric, electricity. And there is a lot of things going on that the general public is not aware of, and I wanted to be here today to make everyone aware of some of the developments in the natural gas industry--excuse me, in the electric industry.

Just a second, I had notes up until just a minute ago--well, the market is changing rapidly. There is every major manufacturer of automobiles now either has a car on the street or it's on the drawing board stages to bring onboard. And the reason why, and it's abundantly clear, it's economics. It is much cheaper to run a car on electricity than it is to run a car on any other fuel, especially one that fuel can be gained through renewable resources like solar energy, and wind and hydroelectric and other geothermal. There are a lot of other sources for making electricity.

I think that the problems that are evident today in the making electric cars feasible are almost the same problems that we faced almost 50 years ago, or 40 years ago when I had the CNG business, and that is infrastructure and the cost of the conversion. And I have seen those things in the CNG and natural gas business dropping, but the fact is that in the electric business, those costs are dropping, too, and I think that the reason I am here today is to make everyone aware of which way the wind is blowing.

There is a Company in California called Tesla. It is owned by a man named Elon Musk, Mr. Musk used to own a

company called Paypal, which he sold for billions of dollars, and he is--he also owns a company that makes rocket ships called Space Explore Supply and Equipment to the space station, and he has a third company which is a solar powered company that has solar--

manufacturers solar equipment. Mr. Musk is now building a series of charging stations along I-5 in California, and he has announced his plan to build refueling stations all the way up I-15 through--up into Nevada--I mean up into Wyoming and across to Wyoming on I-80, all the way across the United States.

He has a little selfishness in this program because he says if you will buy my cars, I will furnish you fuel for free for life. And so that is an incentive for him to sell his cars and he gets his fuel from his solar stations. He put solar power at the site where it is at.

Right now one of the major hurdles in the electric car market is the high cost of lithium batteries. Lithium is a rare mineral and we do not have any lithium deposits in the United States. We get almost all of our lithium from China. I've made a number of trips to China and where--I am affiliated with the companies that build these lithium batteries, but until they solve the battery problem, the electric car market is going to be pretty slow.

But there's developments going on all over the

United States to develop better batteries and one of them is at MIT, where they are taking carbon fibers, and carbon is an abundant resource, and they are saying that they can come up with a better battery using these carbon fibers.

So when I say the challenges that we faced back in the days when I was working in the CNG business are the same challenges that we face today in the electric car business, I know that within a few years, there's going to be some development which are going to revolutionize the way we view our transportation.

One of those things that is happening is happening right here in the State of Utah at Utah State University. They have an energy dynamic lab. They call it EDL and EDL is working on a project, which has already been developed in some other places in the world, but that project is really exciting to me. And what they what they do is they mount electric coils underneath pads, and this is being installed at the University of Utah right now on buses, and those buses will drive over those pads, and while they are stopped, they will get a partial charge from those pads.

In Korea, they now have three roadways that run and the full distance of the road has an electric wire running down underneath the surface of the road. As the cars travel down the road, it recharges from that electric cable that is under the highway. They also have one of those roads in Venice,

1 Italy, and those roads are going to come to Utah, eventually. 2 And I think that taking taxpayer money and 3 developing a fuelling stations for CNG is probably the wrong 4 approach. I think that private enterprise can handle the CNG 5 stations, and I applaud the people that are trying to promote 6 CNG. I think it's a good way to go. But I think in the long run. 7 electricity is going to be the one that is going to win. I will take 8 any questions. 9 COMMISSIONER CLARK: Thank you, Mr. Clark. 10 Are there any questions for Mr. Clark? Thank you, you are 11 excused. MR. CLARK: Thank you. Chase Hanchet? Mr. 12 Hanchet, do you intend to offer sworn testimony? 13 14 MR. HANCHET: Yes. 15 COMMISSIONER CLARK: Please raise your right 16 hand. 17 CHASE HANCHET, called as a witness and having 18 been duly sworn, was examined and testified as follows: 19 COMMISSIONER CLARK: Thank you. Please be 20 seated and State your full name for the record and spell it and 21 indicate the organization that you represent. 22 MR. HANCHET: My name is Chase Hanchet, 23 C-H-A-S-E, H-A-N-C-H-E-T. I represent Blue Star Gas affiliated with Alliance AutoGas. And before I begin, I wasn't able to put 24 25 any of brochures on file, I would like to share them with you real

fast for you to look over, if that is okay.

COMMISSIONER CLARK: Let me recommend that you file those with the Commission so they can become part of the record. Let me emphasize again, any who presented PowerPoint presentations today or distributed materials, if you would please file those with the Commission so that they can become part of the record of this proceeding, unless you intend that they not become. So thank you very much.

MR. HANCHET: Thank you. So as I said, Blue Star Gas, we convert vehicles to run on propane autogas. Our market is fleet vehicles and not individual vehicles.

As part of the propane in industry, we are concerned about the lack of representation of the propane industry has received to this S.B. 275. Propane would like to have the same access to the credits and incentives that the bill makes for CNG. And some of those reasons would be, I will compare them with autogas, propane, CNG, and electric. The cost per vehicle were similar to the CNG. Our systems are about \$5,500, a little under \$6,000, tax not included. With the \$2,500, that helps.

The fuelling station, though, that is a big difference. With one fuelling station for the CNG, we can replace at minimum 15 autogas dispensers in different areas. And another thing, with a company that has a larger fleet that does high milers or spends quite a bit of fuel, we will supply

them with a private infrastructure with no upfront cost. The only cost that we ask for them is the \$4,000, rough number of crash posts and electrical, and that is because after our five- year agreement, if they are no longer wanting to do business with us, we can take our tank and leave and they still own that property.

Another thing is we can also convert two light-duty vehicles for the price of one CNG heavy-duty vehicle. Our heavy-duty vehicle also gets better range and light range. Our light vehicles get better range. We only see at max, a ten percent less decrease in any kind of mile per gallon or mile per usage versus what CNGs are seeing somewhere around 50 percent.

The bill says all fuels were included in this but we have yet to hear anything about propane. In the northwest, we have had a lot of success with large companies, such as France Bakery, all the way to Wilmont County Sheriff's Department. We are a small family-owned business. We've branched in Salt Lake. We have been having a lot of headway with different companies and we are about to lay down ground for our office.

We also understand that Questar has the market by a large margin in this area. We have never made an effort, or will make an effort, to compete with them. We solely know that every--no alternative answer for every fleet need, and we understand that there's--we all love CNG. We think it's great. It's similar to propane. It's one carbon difference. And we

1 understand that electric is great and they have their place. 2 CNG has their place. Propane has our place. And that's why we 3 would like to work with all alternative fuels and be equal with 4 those, as well. 5 We live in a State that believes in the free market 6 principal, and I encourage the Commission to carefully weigh 7 the report to include propane in its report, to try the same 8 incentives be offered as CNG. And one thing, in my conclusion, 9 I would like to just say, the \$2,500 tax incentive ending at the 10 end of 2014, and instead of spending the \$5 million be dumped 11 in that and would go to fleet managers or individual owners. 12 And say at the end of the year, after 2014, instead 13 of demolishing the tax credit, to slowly, say in 2015, it goes 14 from \$2,500 to \$2,000, and after that, it goes to \$1,500, to 15 really kind of spark the urgency that alternative fuel is a big 16 need and that there is a lot of different options that they can 17 accommodate them. That is all I have. 18 COMMISSIONER CLARK: Thank you. Is there cross-examination for Mr. Hanchet? Thank you very much. You 19 20 are excused. Lisa Yoder? Ms. Yoder, do you desire to present 21 sworn testimony? 22 MS. YODER: No, sir. I would like to make 23 comment, please. COMMISSIONER CLARK: Please be seated. 24 MS. YODER: Thank you. 25

COMMISSIONER CLARK: We will be pleased to hear your comments.

MS. YODER: My name is Lisa Yoder. I work for Summit County Government. Summit County is pursuing compressed natural gas for a portion of its fleet. We recognize that alternative fuel vehicles, the variation of them have different purposes for different uses. For a portion of our fleet, we find that CNG is going to be beneficial for emissions reductions and for cost savings to taxpayers.

For the past ten months, the County has worked with a private firm to develop a compressed natural gas refuelling station that would serve Summit County, the Top Stop. That's the only CNG station in Summit County and is not conducive to our--the range of our vehicles. That's in Park City and we are out in Coalville. The point I want to make is that Questar has been hugely beneficial to the compressed natural gas market and vital to the possibility of getting compressed natural gas to serve the County, as well as the public sector.

Section 54-1-13 of the bill speaks directly to local government supporting the expansion of the infrastructure. The County's budget has all it can do to pay for the incremental cost of these vehicles, and we have seen that the private sector has not been able to step up and build a station to serve the citizens, as well as the County. The private sector, along with Questar, has been able to build a phenomenal north-south

infrastructure, CNG infrastructure, but the east-west corridor that the County and citizens of Summit County need is completely underserved. The only station is Evanston, then into Park City, and like I said, is not conducive to the County, and then Salt Lake City.

I do not feel that the market has been able to provide the infrastructure. I personally drive a CNG vehicle and I have the to drive 11 miles one way to get fuel. So I would like to suggest that the Commission consider supporting this bill, supporting Questar's role in helping to build the infrastructure as they have done so well over the past 15 years that I have known of them. The \$5 million investment is, as we talk about bang for the buck, \$5 million will put approximately five stations online. That will last 20, 30 years and serve numerous vehicles.

And, finally, in my experience in 15 years of working in alternative fuels, to fund--we as a County, we can buy the vehicles but we can't buy the vehicles because we have nowhere to fuel them. So providing funding to purchase--or the incremental costs of the vehicles does not build stations. Contrary to what you may have heard here, like I said, we can pay for our vehicles, we are ready to buy vehicles, but we don't have a place to fuel them. So we need the fueling infrastructure to be more robust in the east-west corridor for sure.

On a private note, my CNG vehicle, when I was close to running out of fuel in Little Cottonwood Canyon, to get

1 any where near a CNG station was 25 miles away. It's a long 2 ways to go when you are on empty. So it is not exactly 3 convenient as many have purported here today. 4 As I said, the County is definitely an advocate of all 5 alternative fuel vehicles. We feel for some of our fleet, CNG is 6 the way to go, and the private sector seems to be making more 7 advances in LNG fueling infrastructure, and CNG is still 8 important to many--to smaller local governments. So thank you. 9 COMMISSIONER CLARK: Thank you, Ms. Yoder, 10 very much. You are excused. Claire Geddes? And, Ms. 11 Geddes, do you intend to provide sworn testimony? 12 MS. GEDDES: Yes. 13 CLAIRE GEDDES, called as a witness and having 14 been duly sworn, was examined and testified as follows: 15 COMMISSIONER CLARK: Please be seated. And 16 if you want to make comments -17 MS. GEDDES: Yes, I want to make them part of my 18 testimony. My name is Claire Geddes, C-L-A-I-R-E, 19 G-E-D-D-E-S, and I worked in utility regulation, probably off and 20 on for the last 20 years. I have run two organizations, one 21 United We Stand back in the early '90's and then went to Utah 22 Legislative Watch and one of my primary interests has been in 23 utility rates. And we have worked very hard with the committee 24 over the years to keep rates in Utah reasonable and it's been a 25 big economic boom to the State to do that.

The NSA building was located here because of our electric rates, not because we all wanted it. It just wanted all businesses that have come to the State, that's an issue for them are our good utility prices. So this bill gives me huge heartburn. We are now looking at a new precedence where we are going to ask just natural gas ratepayers to subsidize the NVG market for cleaner air, which it seems relatively wrong to ask one segment to bear this.

And your last witness--was it Yoder? She brought up that the County would like to do that but they can't afford it. Well, my position is, that is where county fleets should be. If people want to change their fleets, and I have talked with Salt Lake County and they are tending to do this and they are tending to use in bill to do it, and if they want to do that, their county taxpayers should pay for that. It shouldn't be something-this is the most aggressive tax you could do for low income and elderly and people who are even just above the low income. This disproportionately hits them.

And also my big concern is, what we are doing here is it seems like we are looking for a solution to a problem that we don't have. We actually have a competitive market, and I appreciate the good presentations that I have heard today because I found out we really have more than I thought we had.

And, you know, I filed in my comments that, you know, the State constitution, basically, said it is the policy of

Utah that a free market shall govern trade and commerce. And so what we are doing is we are going in the wrong direction with this bill and I think you can actually--my concern would be do no harm. You have a market out there. If you come in and subsidize a monopoly to compete with that market, you can actually damage that market. It isn't that it just that it wouldn't grow. You can actually inflate it. And that is a big concern to me because I do believe in the free market and I believe those people that use those facilities should be the ones that pay for those facilities.

So I think that we are talking about here is all wrong, and this--you know, the talk of electric cars versus CNGs, we all know that this bill was written for CNG and it was written for fleets, particularly UTA. And this is a corporation and quasi-governmental corporation that has probably spent more than \$2 billion in the last few years, or since 2003 I think, and they have had every opportunity to use that opportunity to for clean buses and they have not done that. And actually bought a frontrunner that is a polluter, a diesel frontrunner that is not state of the art. So now I am being asked to come back and clean that up.

Also, I've checked the audits and the audits on them basically say, and this is the Wasatch Front's regional counsel have said that--this was in 2008 legislative audit, says transit impact on pollutants are so small it has little impact on

the region's air quality. So what are we going to get for this cost. And my other concern is this \$5 million is just for this year, and they've probably won't even file anything this year. So we are talking about an unlimited budget. And, quite frankly, there are people out there that think you are going to buy their buses and that is a cost that should never be passed on to utility ratepayers.

You are changing our form of regulation when you do that, and once you open that up, you are going to see policy issues--this is an easy way for legislatures to turn the Commission into back door tax collectors and you will be set in the position--they don't want to take the heat but they don't care if you do. So and they are hidden taxes, the worst kind, so people won't even know what they are paying for. And once they find out they can do this, mark my words, this will be a door you never want to open because it will expand like you've never seen. That hurts our economy, that hurts the public and it's a disassociated cost.

So I strongly urge you to look at this in the light of, will it really clean the air. And, you know, there was a recent study by the University of Utah, in concert with the Environmental Protection Agency, the clean air people here, which basically said that they found that it used to be like 58 percent of the pollution was from automobiles, but now they are saying that outdoor stoves and emissions from cooking happen

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to be higher than automobiles. Now that would even lesson the impact of what I have already seen here.

In this study, you know, the federal government said that clean technology, we have talked about the 3 tier program for the EPA that they have out, those are probably the most effective way to clean up the air with the minimal cost, because when you take money out of somebody's electric bill or gas bill, that is money that is not going to into the economy, and it may be something that really hurts a lot of people.

But my big concern is not this 10ó but the \$5 million tap that goes away and what comes after this when people find out this is easy way to tap in. It is odd that they would put this to the Public Service Commission, clean air. The reason this was done is because you have a mechanism to take money from us. EPA--the environmental quality doesn't.

And, you know, you have--your customers are the utility customers, and you have to honor what they would--you're the last protection for them and to be turned into a taxing agency for anybody that wants to come up, and I am not convinced this is going to do much for the air, anyway. And those are studies that have to be done and don't go out and make a decision on any of this until you are absolutely sure what impact there will be. And, also, think about those counties; if a county fleet wants to change, go to their counties. ask their taxpayers, if their taxpayers agree, they will do it and

that is the way government should work. You should be paying for costs of that government through that government; not through utilities rates. And I appreciate so much the time and work you have put into this. I realize you have a thankless job and you are the ones that will take the heat when this all comes down, and so I urge you, though, to be very, very careful. This is a precedence and it's a bad precedence. Thank you. COMMISSIONER CLARK: Thank you, Ms. Geddes. Insofar as we are aware, Ms. Geddes is the final party to present a statement to the Commission today. I should ask, are there any questions for Ms. Geddes before she is excused? Okay, thank you, Ms. Geddes. We will be in recess until tomorrow, the same place, at 1:00 p.m. Thank you very much for your participation today. (The hearing was concluded at 12:00 noon.) 

1	REPORTER'S CERTIFICATE
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3	State of Utah )
4	)
5	County of Salt Lake )
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7	I hereby certify that the witness in the foregoing
8	hearing was duly sworn to testify to the truth, the whole truth,
9	and nothing but the truth in the within-entitled cause;
10	That said deposition was taken at the time and
11	place herein named;
12	That the testimony of said witness was reported by
13	me in stenotype and thereafter transcribed into typewritten form.
14	I further certify that I am not of kin or otherwise
15	associated with any of the parties of said cause of action and
16	that I am not interested in the even thereof.
17	IN WITNESS WHEREOF, I set my hand this 10th
18	day of August, 2013.
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22	Kellie Peterson, RPR
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