Tecogen
Fourth Quarter 2018 Results
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Operator: Greetings, and welcome to the Tecogen Year-End 2018 Earnings Call. At this time, all participants are in a listen-only mode. A question-and-answer session will follow the formal presentation. If anyone should require operator assistance during the conference, please press star zero on your telephone keypad. As a reminder, this conference is being recorded. It is now my pleasure to introduce your host Bonnie Brown, CAO, Treasurer and Secretary. Thank you, Bonnie, you may begin.

Bonnie Brown: Thank you, Jessie [sp]. Good morning and thank you all for joining our year-end 2018 earnings call. On the call with me today are Benjamin Locke, our CEO, and Robert Panora, our President and Chief Operating Officer. Please note, this call is being recorded and will be archived on the Investor section of our website for 30 days following the call. A copy of the press release regarding our year-end 2018 earnings is also available in the Investor section of our website.

Before we begin, let me briefly cover our safe harbor statement. Various remarks we may make about the company's future expectations, plans, and prospects constitute forward-looking statements for purposes of the safe harbor provisions under the Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors, including those discussed in the company's most recent annual report on Form 10-K and quarterly reports on Form 10-Q under the caption Risk Factors, which are on file with the SEC and available in the Investor section of our website under the heading SEC Filings.

We may elect to update forward-looking statements at some in the future. We specifically disclaim any obligation to do so. Therefore, you should not rely on any forward-looking statements as representing our views as of any date subsequent to today. During this call, we will refer certain financial measures not prepared in accordance with Generally Accepted Accounting Principles or GAAP. Reconciliation of these GAAP financial measures to the most directly comparable GAAP measures is available in our earnings press release and in the Investor section of our website. I'll now turn the call over to Ben for a business update.

Benjamin Locke: Thank you, Bonnie. So, as the agenda on slide 4 indicates, I'll start with a brief company overview, followed by a top level review of the company's performance and financial

results for the fourth quarter and full year 2018, along with recent achievements and accomplishments. Bonnie will then discuss the financials in more detail, followed by Bob, who will give an overview of our emissions technology development efforts. I will then have some final remarks before we take questions. As always, I'd like to start off by reminding those who may be new to our company about Tecogen's core business model shown on slide 5, heat, power, and cooling that is cheaper, cleaner, and more reliable. Our proprietary technology for improving efficiency, emissions, and grid resiliency is truly disruptive to traditional methods of heating, cooling, and powering buildings and infrastructure.

Turning to slide 6, the fourth quarter of 2018 saw revenues of 9.3 million, a 17.3% increase over the third quarter of 2018 and a 9.2% decrease over the fourth quarter of 2017. Despite the drop in revenues quarter-over-quarter, our adjusted EBITDA came in at 502,000 for the quarter versus 533,000 for the fourth quarter of 2017. Our gross margin for the quarter improved to 40% versus 37% in the fourth quarter of 2017. Also notable in the quarter was an increase in chiller sales, which I will talk more about later in the call, and growth in our service maintenance revenue as we bring more systems with maintenance contracts online. Also in the quarter, we recognized the goodwill impairment of 4.4 million. This was due to the acquisition of the ADG assets in corresponding accounting treatment. Bonnie will address this more in her discussion.

For the year, 2018 saw record revenues of 35.9 million, an 8% increased over 2017. Gross margins for 2018 came in at 38% versus 39% in 2017, and adjusted EBITDA for 2018 was 217,000 versus 1.1 million in 2017. And as I've mentioned in previous calls, we are seeing tremendous traction in our chiller, Tecochill chiller systems as evidence by a record 7.2 million in chiller sales in the year. Again, I will talk more of our plans to further increase chiller sales and the reasons for it later in the call. Overall, as the chart indicates, we've come a long way in the past few years, more than doubling sales and tripling process over the past 4 years.

Moving on to slide 7 and looking more closely at the fourth quarter, you can see the revenue mix, a drop in product sales compared to the fourth quarter of 2017, which was a breakout quarter from the introduction of the upgraded InVerde e+. As I'll discuss later, we are deliberately shifting some sales resources to our chiller products to adjust the changing market needs for our equipment. As I said before and will repeat again, a chiller can accomplish just as much grid size savings and greenhouse gas benefits as a cogeneration unit. So, from a product mix standpoint, we are fine selling more chillers to meet the energy saving needs of customers over cogeneration when the situation calls for it. And as I mentioned, our fourth quarter adjusted EBITDA of $502,000 benefited from our margins of 40%.

Turning to slide 8 and looking at full year and more detail, you can see our 8% increase in year-over-year revenues. And despite a slight decrease in overall margin, we had record gross profits

for the year. 2018 expenses were higher overall than 2017 with increases in legal expenses, R&D investment, and sales expenses accounting for large part of the increase. We believe our legal expenses will significantly decrease as fees related to ATG acquisition are non-recurrent. We also will continue careful investment in R&D to progress our Ultera emissions technology. Bob will describe the results of that activity later in the call. In all, 2018 was a good year for the company with record revenues, increase in gross profit, and consistently strong gross margins.

Moving to slide 9, our backlog has grown substantially, currently at almost $30 million as of yesterday, March 27. As I have said previously, our backlog consists of product and installation revenues and does not contain our recurring service revenues. Given the size of the backlog, I thought it will helpful to break it out into products and installations services. Product backlog, which consisted of our equipment and associated accessories, stands at $15.4 million, and the remaining $14.5 million of backlog is installation services associated with that product. We believe it is helpful for investors to see the portion of backlog associated with installation services since that portion tends to be lower margin and take longer to complete.

Also notice in the pie chart, a now significant portion related to indoor growing. We are continuing to aggressively promote our chillers for indoor growing facilities with crops such as fruit, vegetables, or cannabis in some states. Our chillers are ideally suited to these facilities because of the low operating cost of the Tecochill chillers compared to electric chillers and

utilizing the waste heat from our chillers for heating and/or dehumidification of the growth states. Our systems have become the design basis for several large growers who are planning additional facilities. I expect more orders for our equipment in this space in the coming months. Also note the increase in office building segment. This segment is anchored by the largest order in company history last month, $8.3 million, involving a charge generation system for a data center located in Manhattan office building.

This project is significant, not just in terms of the size, but also demonstrate data centers as an expandable market for our systems. The project is also notable because it will be owned by an ESCO financing company under a long-term agreement with the building owner, and Tecogen have the service contract for the life of that agreement. I would also like to point out that our backlog currently does not have any sales of our TecoFrost product that we are re-launching this year. I expect to have preliminary sale of the TecoFrost this year but will not forecast sales into the backlog until we are more comfortable with the rollout timing. In all, I'm very pleased with our backlog and hope that differentiating products versus install will help investors better understand the significance.

Moving to slide 10, I want to reemphasize key achievements in 2018 for the company and how they relate our plans going forward. First, as mentioned, we adjusted our sales strategy to have a renewed focus on our chiller product. Tecogen is the only natural gas engine driven chiller

manufacturer, which allows us to sometimes take a different approach for certain projects seeking energy savings. Replacing a centralized electric chiller with a Tecochill often accomplishes the same energy savings as cogeneration but without any competitors and, in most cases, with lower capital outline than an equivalent-sized cogeneration system.

By way of example, our press release this week described the large residential facility with tremendous energy costs. The four STX chillers we're providing would have required about half a mega lot of cogeneration in order to reduce the same energy cost but with a much higher capital cost. Our solution simple replace their existing chillers with Tecochill, and the only cogeneration needed afterwards was a cost effective 75 KW Tecopower unit. Using our chiller product as an alternate proposal for projects initially looking for large cogeneration is a powerful way to eliminate competition and reduce the capital costs for the same energy savings. Chillers are also typically specified the engineers and manufacturers representatives and are, therefore, much more transactional in terms of project closing. Adding the TecoFrost ammonia chiller line will further our advantage in an entirely new market in industrial refrigeration, I hope to have more news about the TecoFrost sales in the coming quarters.

Next, we increased the productivity and reliability of the sites acquired from ADG in 2017 to the point where we're received significant interest from various ESCOs to sell some or all of the assets. Ultimately, we decided to sell a portion of the assets to sustainable development

corporation LLD STCL for a net of $7 million. The sale includes an O&M agreement for Tecogen to continue servicing these sites. So, despite some loss in energy revenue, we will continue to receive service revenues from STCL. We currently do not have any plan to sell the remaining ADG sites still owned and operated by Tecogen.

Next, as Bob will talk about in a few minutes, we have made excellent progress without Ultera emissions technology most notably through our partnership with Caterpillar, Mitsubishi Fork Truck of America, or MCFA. And lastly, with the ADG asset sale and our positive cash flows, we have achieved the degree of financial stability that allows us to execute on our growth plans without the imperative for additional capital. In all, I think, we did a good job in 2018 setting up the company for success going forward in our core markets and with our Ultera emissions program, and our financial outlook is quite solid.

Moving to slide 9, I wanted to give a little more color on our core business markets. As our earnings release said in 2018, we sold 13 chillers to 7 different indoor cannabis growing facilities with another 3 sold to an indoor produce growing facility in Florida. The Tecochill product is increasingly becoming the design basis for these indoor growing facilities, and we are closely monitoring the permitting of new growing facilities in New York, New Jersey, and other states as anticipate substantial new production due to recreational use legalization. We have also received tremendous excitement for the reintroduction of the TecoFrost product. If you

were particularly attentive at the beginning of the call, you would have seen that TecoFrost logo on Slide 4 along with our other product logos. TecoFrost was a tried-and-true product line for many years, ultimately being discontinued because of gas price spikes in the 2000s, as well as a lack of good emission controls on earlier units.

We have now reintroduced TecoFrost, given the compelling economics of natural gas pricing and availability and our implementation of Ultera emissions on the product. Bob will talk more about the importance of emissions in states like California, but suffice to say, we generated significant interest at IIAR, the leading ammonia refrigeration show earlier this month, with both customers and with Vilter, our manufacturing partner, who also recognizes the market potential of TecoFrost. Customers for this equipment represent a new sales opportunity for Tecogen that could not be filled with our existing products and promises significant revenue growth potential in our core business. You can see the picture of the TecoFrost unit at our booth at IIAR on the slide.

Next, we have developed relationships with several energy service companies, or ESCOs, to provide third-party funding for project, development, and subsequent ownership of the asset. As mentioned, we now have a relationship with STCL for projects finance and a data center project mentioned earlier in the call is a different ESCO partner. The financial sophistication of these ESCOs allowed them to offer compelling savings to customers under long-term energy

saving agreements, or ESAs, and provide the necessary capital for very large turnkey projects. We have a pipeline of additional opportunities with a few of these ESCOs that we hope to announce in the coming quarters.

And lastly, as I mentioned last quarter, our micro grid enabled InVerde system has obtained UL 1741 SA, or smart inverter certification, as required per cogeneration systems in California. This additional certification was developed to help meet the critical needs of utility when large amount of distributor generation is in operation on the network. Having the smart inverter certification will allow Tecogen projects to participate in additional revenue generating utility program, such as reactive power control, demand response, and frequency correction, thereby creating additional economic benefits for the system. By virtue of Tecogen's CERTS micro grid feature, we can also integrate battery storage to be operated and controlled by InVerde electronics, allowing additional revenue to the foundational cogeneration economics. The final stages of this new certification will occur in mid-2019 and is expected the other state will adopt similar requirements for this important certification. Now, I'd like to turn the call over to Bonnie, who will cover more details on our financials, followed by Bob who will describe our missions in more detail. Bonnie?

Bonnie Brown: Thank you, Ben. I'd like to start with a discussion on the fourth quarter's results and then move to year-end. Slide 12 contains some of the highlights of the Q4 year-on-year

financial results. Overall, consolidated gross margin was 40%, and consolidated gross profit was 3.7 million for the fourth quarter 2018 compared to 37% and 3.8 million for Q4 2017, a 2% decrease in gross profit year-over-year. Total product revenues for the quarter decreased by 20% compared to fourth quarter of 2017. Total sales grew 21% year-over-year, making a strong showing in the quarter and for the year 2018. Product gross margin remain consistent at 21% for both Q4 '18 and '17. Long-term service contracts and part sales increase by 11% on a year-over-year basis and continue to provide its annuity-like revenue stream. Total service and installations revenue declined by 4% for the quarter compared to the fourth quarter of '17, however, it did continue to deliver more than half our product and service revenue for the quarter. Service gross margin was 39% for Q4 '18 compared to 34% for Q4 '17, a 15% improvement.

Energy production activities from our ADG sites contributed 1.6 million to revenue for the quarter. With gross margin of 41%, this revenue source provided an important second source of annuity-like cash flows with its long-term contract. In Q4 2018, following the performance of our annual goodwill impairment test, the company recorded a goodwill impairment loss of 4,391,000. By way of explanation of this impairment loss, let me start by saying our goodwill resulted from our stock-to-stock merger with ADG in 2017, which was accounted for as an acquisition. The assets we acquired in the merger comprised our energy production reporting

unit. A goodwill impairment results when the fair value of those assets become less than what we've originally paid for them. In this case, that happens primarily due to two factors.

First, at the time of merger terms were be negotiated, our stock price, which is the basis for what we paid for the assets, was in 350 to 360 per share range. On date of the merger closing, our stock prices spiked to 4.02. That resulted in the purchase price being approximately 2 million more than was anticipated, which ultimately ends up in goodwill. The second factor has to do with the running or exploration of the terms--of the energy production contracts we acquire from ADG. Those contracts were long-term, generally 10 to 15 years. We based our fair value determinations for the reporting unit primarily on the discounting cash flows from those contracts.

As time passes, we recognized those cash flows and earnings. However, as the remaining terms under those contracts shortened, remaining cash flows become less and less and accordingly so does the fair value of the reporting unit. Since the date of the merger with ADG, we have not added new business to the reporting units to offset the reduced cash flows from the existing contracts. It should be noted that since the date of the merger through the end of 2018, Tecogen has recognized gross profit from the energy production reporting unit of $4.4 million.

Net loss attributable to Tecogen for the quarter was 4,372,000, which improves the goodwill impairment loss of 4,391,000. Excluding this impairment loss, the quarter provided net income attributable to Tecogen of 19,000. Q4 '17 provided net income of 269,000, a decrease of 250,000. As discussed earlier, we continue to invest in research and development activities. These costs for Q4 '18 amounted to 305,000 compared to 296,000 for the same period in '17. Additionally, selling expenses increased by 45,000 year-over-year as we invest in various sales activities. In addition, our G&A expense included non-recurring costs in connection with the ADG merger, as well as expenses associated with the opening and operation of our Florida service center, both contributed to the increase in operating expenses of 244,000 and a decrease in net income of 250,000 year-over-year.

Slide 13 presents the financial metrics for the year ended 2018 as compared to '17. Total revenue grew for 2018 by 8% to 35.9 million compared to 33.2 million in 2017. While product revenue for the year decreased by 3% as compared to '17, chiller sales grew substantially by 49% for the year. Product gross margins remain consistent at 38% for both years ended '18 and '17. Service revenue for the full year of '18 was 16.9 million, showing 3% growth over the 16.4 million for the same period in '17. Long-term service contracts and part sales represented 24% of the year's total revenue and continue to provide annuity-like revenue stream. Total service and installation revenue increased by 3% for the year compared to 2017 and continue to deliver

more than half of our product and service revenue for the year. Service gross margin was 37% for 2018 compared to 38% for '17, a 1% decline.

Energy production activities from our ADG sites contributed 6.4 million to revenue for the year and gross margin of 41%, providing 2.6 million in gross profits for the year. 2018 represented the first full year of these energy production activities as ADG was acquired in May of 2017. Overall, consolidated gross margin for the year was 38% and consolidated gross profit was 13.5 million compared to 39% and 13 million for year-end 2017, a 1% decrease in gross margin and a 5% increase in gross profit dollars for the year ended 2018 compared to '17.

Net loss attributable to Tecogen for the year was 5.7 million, which includes the goodwill impairment loss of 4.4 million. Excluding this impairment loss, the year resulted in a net loss of 1.3 million. Year-end 2017 provided net income a 47,000, a comparative decrease of 1.4 million. As discussed earlier, we continue to invest in sales, research and development activities for our future. These costs in 2018 amounted to 4 million compared to 3.2 million for the same period in '17, an increase of approximately $800,000. In addition, our G&A expense included a full year of ADG overhead costs, non-recurring charges in connection with the ADG merger, as well as the opening of our Florida service center, all contributing to the increase in G&A expenses and the decrease in net income for the year ended 2018 as compared '17.

Slide 14 presents the reconciliation of adjusted non-GAAP EBITDA for the fourth quarters and years ended December 31, 2018 and '17, which has been referenced throughout the presentation and in the release. Of course, after adding back interest taxes, depreciation, and amortization to net income or loss attributable to Tecogen, we come up with the standard EBITDA, which for the fourth quarter of 2018 was negative 4.1 million, compared to a positive 487,000 for the fourth quarter of '17, with goodwill impairment accounting for substantially all of this different. Likewise, EBITDA for the full year of 2018 was negative 4.8 million, compared to 763,000 for the full year of '17.

After adding back the non-cash adjustments of stock-based compensation, the mark-to-market adjustment creating unrealized loss on investment securities and the goodwill impairment plus the non-recurring merger related expenses, we reach adjusted EBITDA, a non-GAAP measure that management uses as an important metric. For the year ended December, 31, 2018, adjusted EBITDA was $217,000 compared to 1.1 million for the full year of 2017. For the fourth quarter of 2018, adjusted EBITDA was 502,000, compared to 533,000 for the same quarter in 2017. Now, I'll turn the call over to Bob for technology updates.

Robert Panora: Good morning, and thank you, Bonnie. My discussion today, as in the past, will be to provide an update to our work relating to commercial applications for our engine emissions technology, Ultera. Before doing so, I want to speak out about our TecoFrost

experience 15 plus years ago that Ben spoke about earlier. At that time, we had strong interest in the product, especially in California, which is not surprising. The reason is a major agricultural and food processing center, as well as having abundant industrial cooling applications. In that era, we sold units to wineries, bottling and ice making plants, and to dairies, however, two problems emerged. Since regulations became more restrictive, to which we had no robust solution while natural gas prices were steadily increasing, which was a major concern to our customers. Today, the picture is [inaudible] in that the industrial cooling market, especially in California, is strong, while emissions rates are, of course, still tight. But Ultera technology is available to us with good success in So Cal, even in unfamiliar engine products like the pump application that we've done in January and so forth. Perhaps, most importantly though, natural gas prices did materialize to such an extent that our customers--customer base has a strong confidence in a stable inexpensive supply for many years. All-in-all, a very good time to return to this market.

Now going back to emissions, we have several initiatives that are ongoing, but I'll start with the one that we believe to be the most important, which is our fourth project. By way of background, we received our initial funding from the propane industry, whose members are keenly interest in the technology as being importance in maintaining market share relative to electric power trucks. Central to the issue, of course, is emissions, particularly the ones that

directly relate to human health and for which our [inaudible] concern where indoor operation is common.

As Ben mentioned, we are working with MCFA, a well know manufacturer in the North and South American markets. They elected to go forward with the program after the initial FERC funded phase concluded. They were favorably impressed with the Ultera system in this potential following the witness test [inaudible] in our laboratory in Massachusetts. We feel they are a particularly good company to be working with as the primary engineering collaboration is not so much with Caterpillar, but with Mitsubishi, which has a vast [inaudible] in many different applications. So, MCFA agreed, this is the plan to provide custom engine tuning for the fork truck, which we would utilize to maximize the effectiveness of Ultera process.

I've discussed in previous calls engine tuning has been important part of the process and one we frequently, routinely used in Tecogen products to make the performance improve. Once the software was finalized at Tecogen, MCFA would receive the truck for evaluation at the facility in Texas. Since our last call, we received the initial batch of control software from the Mitsubishi engineers in Japan where the engine will be sourced. Subsequently, we tested version of the software in our standard test cycles. The testing revealed good improvement, achieving levels we would project to be very close to the Near Zero certification that we had as our goal. However, a detailed examination of the data showed that the tuning could be improved in

various operating points in the cycle. We constructed an operational map for the engine highlighting the regions where improvements are needed and reviewed them with the folks at MCFA. They rarely agreed to take our recommendations to Mitsubishi in Japan for guidance in reviewing the engine tuning. Very recently, we received the second iteration from Mitsubishi, and we have initiated our evaluation, although we have no results yet. Next slide, please.

There are several other Ultera activities are ongoing and I should report on today, as well. In 2017, we had supplied a customer without their Ultera kits for group of natural gas generated in Southern California that required permitting for general use beyond the 200 hour annual exemption given to emergency generators. As such, we needed to operate within permit limits that had never been achieved by commercial natural gas engines without some sort of exemptions, like the 200-hour limit I spoke of and also the CHP units, which had a heat recovery credit. So, these applications got none of those exemptions, and I'm pleased to report all the generators are permitted and have past their final source test. I believe these units are the only natural gas engines to meet source test requirements these variable levels, so it's an important Ultera milestone. On another matter, we have been notified by Southern California and Water District of Southern California that approval has been granted for an Ultera water pumping project. The plant will utilize the Ultera kits for missions after treatment applied to several 800 horsepower CAD engines. These will be the largest Ultera kits we have [inaudible] for the first time involved a new installation, not a retrofit of an old engine. So, that's a first for us.

Lastly, our work with a research institute relating to Ultera applications in light vehicles is progressing. This is the first phase of their work, which was to develop custom [inaudible] formulations in this funded, of course, by Tecogen. The custom test samples have been fabricated and are ready to test, and we'll begin doing that--they will begin doing that shortly. With that, I'll turn the call over to Ben for his final words.

Benjamin Locke: Thank you, Bob, for that update. I'd like to talk now about what investors should expect in 2019. So, looking at slide 17, I'd like to reiterate first, what are some of the key value propositions of Tecogen's clean, reliable, distributed generation systems. As I mentioned earlier at the beginning, our systems use clean and abundant natural gas to reduce heating, cooling, and energy that is cheaper, cleaner and more reliable. Our cogeneration systems are designed with the U.S. utility structure in mind in terms of interconnect certifications, micro grid functionality, and incorporation of other distributed generation assets, such as storage. As we are seeing in California, this functionality is becoming mandatory in some areas, but the economic benefits of providing these great support services will ultimately benefit the economics of using Tecogen technology.

Next, Tecogen has no competitors in the gas engine chiller market. We are focusing our efforts on new and existing markets for Tecochill, such as indoor growing, and will begin selling

TecoFrost into the ammonia refrigeration market later this year. And last, but most consequential in terms of the investor update, we have shown the scalability and effectiveness of our Ultera missions technology on many engine platforms and sizes, from General Motors engines to Ford engines, generac generator engines, Caterpillar engines, whether newer retrofitted, and more recently with the Mitsubishi engine on the forklift project. The result of our retrofits on each of these engines is the same, Near Zero emissions on power to fuel sell. We think our message is reaching a larger investor audience, and I look forward to sharing on other updates in Q1 call in May. With that, I'd like to turn it over to the operator for questions.

Operator: Thank you. Ladies and gentlemen, at this time we will be conducting a question-and-answer session. If you would like to ask a question, please press star one on your telephone keypad. The confirmation tone will indicate that your line is in the question queue. You may press star two if you would like to remove your question from the queue. For participants using speaker equipment, it may be necessary to pick up your handset before pressing the star keys. One moment, please, while we pull for questions. Thank you. Our first question is from the line of James Jang with Maxim Group. Please proceed with your question.

James Jang: Hey. How's it going guys? So, I just want to ask about--so, Ultera seems like a very novel approach to what's going on in the sector, but there are a couple of competitors out there that are using batteries for these fork trucks. So, is there some type of internal deadline

to get this commercialize? And if you can kind of elaborate on your thoughts on the competition with the EVs? That'd be great.

Benjamin Locke: Sure, yeah, it's a good question. We've heard that certainly a lot, and maybe I'll start answering, and I'll hand off to Bob for his thoughts on the matter. But certainly, batteries are an option, but that, by definition, involves a new fleet. If you've got an existing fleet of propane fork trucks and you're going to switch the batteries, well, obviously, you have to get rid of your--you have to add those for the fleet and that's a cost. And that's number one. And number two, that the power density of propane is very important, and then in terms of practicality using a forklift, that the power density of heavy lifting and making sure that you've got a thankful, and you're not going to get interrupted during a load cycle is very important. And, of course, what we're bringing on here is an alternative approach, which is a simpler retrofit. You don't have to buy new fork trucks. You can make it a retrofit and still have all the benefits of propane. So, that's my immediate reaction, but Bob I think has been interacting more closely with a propane folks, because they have many drivers have their own.

Robert Panora: Yeah, the propane industry is--of course they want to sell propane, so they're very interested in it. But from the manufacturers' perspective, they realized that first of all the propane fork trucks perform better, and customers prefer them. And so, all things being equal, the propane trucks are very desirable to operate. They're easy to operate, but they have this

emissions problem that's been sneaking up, so the electrics are not for everybody. They don't last through a full shift often and so forth, and they've got some shortcomings. So again, it's-- there'll be electric fork trucks and gas fork trucks, or propane fork trucks that'll coexist, and I think MCFA people would like to see their primary products stay there as long as they can. And think they see a future for a little [inaudible] vehicle as being a way to last with propane for many years to come.

James Jang: So, I mean you're not under any pressure internally to try to get things out quicker? You just kind of [inaudible]

Benjamin Locke: I'm pushing everything really hard, James. I'm just kidding. No, we certainly don't have any regulatory deadlines, but suffice to say, as Bob was saying, there is an imperative in the industry to show that you can have a propane solid fork trucks with Near Zero emissions. And if you can imagine it, these propane fork truck fleets that are in long beach port in all these other areas where they have very significant emissions problems, if you can retrofit that fleet to have near zero emissions without requiring bazillion dollars of new battery for trucks, that's pretty compelling.

James Jang: And my final question is, so you guys have been growing double-digits in 2012. 2018 was a little slow down. What are some macro forces that you're seeing that's leading to

this? Is just a slight pullback or slowdown in construction or improvement spending? Or is it something else that we're not catching here?

Benjamin Locke: Well, I think the slowdown is not so pronounced, and it's a bit there and certainly, there's timing, as I kind of alluded to, James, and I mentioned it before, we had a tremendous slug of orders when we introduced our InVerde e+ plus, because of the much improved functionality of that thing and, of course, designed that way, particularly for these New York projects. We saw a slug of activity in 2017 and on that product, and the installations of those things then kind of drags a little bit out, which is another reason why, James, I did try to break out the installations part of our backlog, because having a big project like that is very good. It's great for units. There's going to be a construction element that takes a little bit longer. So, you end up having a slug of product sales and then a lingering bit of install, and the timings of those things sometimes overlap okay, sometimes not. So, I don't think you're seeing anything that is alarming or predictive. I will acknowledge, though, that we are seeing this uptake in chiller sales, and all things being equal, if I can flip a project--a hotly-competitive cogen project, if I can flip that into a chiller project and eliminate the competition, I will absolutely do so. So, we're getting a little bit more smarter, James, in term of how we approach some of these cogen project and seeing if we can get a better system in there, and the chillers seem to be a good way to leverage our strengths.

James Jang: Okay. So, [inaudible] I'm--so, chillers are going to be==you think that's going to be a huge--a pretty sizable driver near term?

Benjamin Locke: Yes, I'd like it to be. I'm positioning us up that way, because it's a great place to be in. It's just so much more predictive, selling chillers, because people buy and sell chillers all the time. They install them all the time. It's not like you're buying a piece of art or something, which sometimes cogen projects turn into. So, it's a much more transactional type of sale, which I think would be a good place for us to be in.

James Jang: Got you. Okay. Great. Thanks, guys.

Benjamin Locke: Thanks, James.

Operator: Thank you. Our next question is coming from the line of Amit Dayal with HC Wainwright. Please proceed with your question.

Amit Dayal: Hey. Good morning, guys. Thank you for taking my questions. The fourth quarter, year-over-year decline in sale. You attributed some of that to sales efforts being directed towards chillers. Is there anything else that caused that drop? Any color on that would be helpful. Thank you.

Benjamin Locke: Yeah, again, not so much, I mean-- if there were some real negative trend that was bottling up our pipeline for products or cogen, I would certainly point it out. Some of the incentives are start in the sunset [sp]. Another reason why I'm happy the chiller product segment is growing, because if you can have product that they can subsist on without subsidy, then that's a good place to be. But you've still seen the backlog growing, and as I said, these waves of projects come in slugs, Amit, and we had this slug of orders, and then we're fulfilling out the installations of them now, and our backlog--I think you've seen in the next slug. So, I think our--this business is still pretty strong. But with that said, I'm absolutely conscious and trying to take advantage of more sales and chillers if the opportunity present top over cogen.

Amit Dayal: Understood. And just going to the backlog, at the end of 3Q, backlog was around 20.2 million, and then for the press release, you had 16.6 at the end of 2018, which now jumped to around 29 million. Can you walk us though sort of what happened between the drop in 4Q and the pickup in the first quarter you've seen? And is that more sort of product backlog that has grown in the first quarter or installation backlog that has grown?

Benjamin Locke: I think the best example is probably this data center order, which I said is a great order, not just because it's $8.3 million, but because data centers are just such a perfect application for the InVerde in terms of it--you can do the backup power, you can do the fast

disconnect and reconnect for the grid, all that kind of thing. But that was a big order that went in the backlog. And then you add on to that, we had a number of orders. We had the 12 unit micro grid order late last year. We had a large residential building a couple of months ago or maybe a few weeks ago, an order that was a large--they own a bunch of buildings, and we got all the buildings that was around 6 units. So, the backlog is continuing to grow, and we're just, again, just trying to focus on the chillers, because ultimately, I think that's going to be a much better growth segment for us.

Amit Dayal: Understood. Just forward looking a little bit in terms of the outlook for 2019, do you expect to sort of be at double digit growths--backend double digit growth again in 2019? And in that context, should we expect some sequential improvements in revenues in the first quarter of '19 versus fourth quarter of '18?

Benjamin Locke: Yeah, well, I mean, my goal is to keep growing the core business of the company, and the emission stuff is great. We're making tremendous progress, and that's wonderful, but the end of the day, my goal is to keep the company fundamentals growing. And so, yes, my goal is to keep this growth rate up. Now, can I keep it up? I hope so, and when I look at chillers, I see that market segment as right for growth. When I look at the industrial--the industrial ammonia refrigeration market here in the U.S. and in California, as Bob was saying. But those refrigeration units exist all over the world, and I talk about the InVerde being a U.S.

kind of focused product, and it is. It's [inaudible] interconnect, and all the reasons I talked about the InVerde, but that ammonia refrigeration system--that TecoFrost system is ubiquitous throughout the world, ammonia compression. And so, ultimately, you could see us doing--of course, the Americas with the TecoFrost, but by virtue of some of the sales networks that we have in our partner Filter has, you can see some ability for us to expand that outside to Europe and other locations where a cogen expansion with our InVerde wouldn't be practical. So, again, kind of a long-winded answer there, Amit, but I think a lot of our growth--I hope a lot of our growth can come from our chillers and particularly this TecoFrost product, which could be sold in many places.

Amit Dayal: So, this TecoFrost, can we expect it to show up in the backlog in the 1Q by the time you report a 1Q earnings?

Benjamin Locke: Not quite so sure about that, Amit, just to give a little flavor on how we're going to roll this thing out. We're going to roll it out on the East Coast first, kind of keep these first few sites close to home, if you will. And then start going out, as Bob said, a lot of opportunity on the west coast. I don't see it being a material, meaningful contributor to the backlog till probably later this year. You might see something in between now and then of some sales--I hope you will see a press release about a sale of it in the coming months, but in terms of

the backlog contributor, I'm thinking perhaps later this year, just to be conservative about the rollout.

Amit Dayal: And just last one on the Ultera side. Again, it looks like you're making a lot of progress with these testing related milestones. Should we remain conservative in terms of anything from Ultera showing up as part of a backlog this year?

Benjamin Locke: Well, I'll maybe answer on my perspective on that, and if Bob has something, he can share, but certainly that EMW [sp] that order that Bob mentioned of the retrofit of the Caterpillar engine, and that's going to be in our backlog. Once that gets to the point of the contract being finalized in the dollar amounts, et cetera, that'll appear in our backlog. On terms--but beyond that, in terms of when we're going to retrofit a fleet of four trucks, and is that going to be in the backlog? I think that getting ahead of ourselves a little bit. What I really want to see in 2019 is a demonstration of this on that Mitsubishi engine. If it's a fork truck engine fine, but it's a Mitsubishi engine--to complete our slate of demonstrating all these different engine platform and sizes. And then, at that point, I think we will be in a position to start talking about, okay, what's the next project? What's the fleet we're going to retrofit? How much is that, and when will that go on the backlog? So, my long way of saying, aside from this is Caterpillar retrofit, which is very exciting, you probably won't see fork truck in Ultera related backlog till maybe next year or so. That's very--that's a little bit further out.

Amit Dayal: Understood. That's all I have, guys. Thank you so much.

Benjamin Locke: Thank you, Amit.

Operator: Thank you. Our next question is from the line of Roger Liddell with Clear Harbor Asset Management. Please proceed with your question.

Benjamin Locke: Hi, Roger.

Roger Liddell: Good morning, Ben. A number of points--first, I'm encouraged by the data center opportunity, because an ESCO is involved, presumably, in the specking for the equipment and also the financial--the finance arm getting involved. We've had flashes in the pan in past years, a school district here and there with an ESCO involved, but I don't recall ever seeing any meaningful follow through. Is this data center situation--what are the implications of it?

Benjamin Locke: Sure. Well, there's different types of ESCO, maybe I'll just start off by saying. And some people--you mentioned ESCO, so some people immediately think of the big ones, there's Honeywell, Johnson Controls, Siemens, Amresco, et cetera. And indeed, we have done a fair amount of projects with some of those, without being specific, of course. But we have a few

school districts and other projects that we've done with some of those name brand ESCOs that perhaps, Roger, I could talk with you offline about. But these ESCOs that we're dealing with now or more financially focused.

So, they're not outsourcing the project. So, they're now sniffing out that school system. They're turning to us with a portfolio of dollars and saying, we want to invest this and reliable in a revenue generating assets. Do you have any projects? And so, we end up--Tecogen does the due diligence on these things, which is very important, Roger, because, as you know, if you don't do proper due diligence on these long-term projects, you're going to get skinned alive. So, we do our due diligence on them, we come up with a product portfolio choice, charge gen, cogen, chiller et cetera and the cost, and we'll present all of that to that ESCO. And if it meets their financial metrics and their hurdle rates, they'll go forward, and then they end up leading the agreement--it's a triangle agreement, Roger, right? So, the ESCO will set up an agreement with the host site, in this case the building owner of the data center in Manhattan. The ESCO will set up an agreement with us to build a system, commission it, and do the long-term O&M, and they're paying for everything. And then they, of course, get the long-term revenue. So, the types of ESCOs we're working with on the data center project and the other one's going forward--and STCL and other one--really financially involved and not--and this is a very important point, not trying to force project down our throats that don't make financial sense. We're only promoting projects to them that make financial sense.

Roger Liddell: Okay. Sounds very encouraging. The second point is I'm pleased with the three chillers sold to the Florida indoor grower. I don't think you said cannabis, but if you could clarify your answer whether it's vegetables, whatever versus cannabis. But I take the lack of a service center in Florida was a headwind in the past. Is this Tecochill order a harbinger of fewer headwinds, more tailwinds, and will that service center help in trying to correct the healthcare facilities and the emergency--[inaudible], I mean the long term backup power mandated after Irma?

Benjamin Locke: Sure, yeah. And you hit the nail in the head, Roger, about that those three chillers sold. And that growth facility, out of respect for the customer, I would tell it is not cannabis. It's some type of produce. But you're exactly right. That is the reason why we stood up our Florida service center is because, as I think we maybe have mentioned in the past, we reach a tipping point of engines. When you reach a certain amount of engines, it becomes cost effective from a revenue and margin standpoint to have a guide on there. And we've reach that point, and we now have our office set up done there. And the way this typically unfolds is as now that you got a guide on there, you get more comfortable putting more engines there, and then he gets an assistance, and then eventually you stand up a real proper territory, and my goal for Florida, off course, is it could be the touchstone for the Caribbean. As we start to sell

product, maybe not cogen, but certainly as I'm visioning TecoFrost, that would be the service center to service the Caribbean.

As to your other question, absolutely, Florida and healthcare and the problems they have down there with resiliency comes to mind, how people check [sp] their chilling systems. And we have--now with--we have, off course, you know, our Tecochill and now we have TecoFrost, and we have even have seldomly talked about air sourced chiller unit, which is still very functional and uses some case, and that air sourced unit is typical what you see in a nursing home, a 150 bed or 200 beds nursing home in Florida. And importantly Roger, as I mentioned repeatedly at this point, the chiller replacement has so much better economics in terms of ROI. All you have to do is justify your incremental cost. So, you can get away with a smaller spark spread is what I'm getting at. So, areas like Florida may be don't have the robust spark spread of a New York or a California, they still got a good spark spread--this maybe not great for cogen, but absolutely fitting for chillers. And so, we're starting to see that down there. The growing facilities erupting down there is certainly helpful to us, so a great way for us to really populate that Florida territory with engines.

Roger Liddell: California--you've touched on the fact that generators were now permitted. I take it this is a separate qualification permit from South Coast Air Quality Management District? That was a year now, as I recall. So, what's new? And talk to me about the opportunity, and if

there isn't a meaningful opportunity, I would expect your candor on that. It's so nice to have, but it's not going to be transformational/

Benjamin Locke: Sure, I think, Bob's closest to that. I'll maybe let him answer that. Roger, you may have noticed the Bob is actually not in the office with us. Oh, okay there you are.

Robert Panora: Yeah, I'm sorry Roger, when you spoke the first sentence in your question, I'm getting an incoming call on my cellphone, and it blocked your words. Could you repeat that question for me?

Roger Liddell: Yeah, there was brief mentioned made of a level of permitting on generators, and I want to know whether this is different and advanced beyond the South Coast Air Quality Management District Certification of a year ago? And is there a meaningful opportunity in this generation area in California? Or should I ignore it and move on to something else?

Robert Panora: Yeah, so just to be clear, we've done CHP in Southern California to that same rule, but when we do CHP, they give us a credit because of the hot water--we're allowing the hot water boil to shut off. So, we get a little bump in the number that we have to meet. And, of course, any emergency generators, they get a very much looser standard if they're only going to run 200 hours a year. So, these machines have no heat recovery benefit, no limitation on run

hours, and they were permitted to the lowest level ever under that rule. No one's done it as far as I know, and I'm sure no one has done it.

So, the question is can you make a market with this? And you could conceive--conceivably sell customers who want to do demand management of their peaks and valleys of power. You can see situations where people want resiliency, and they want to have a grid that's going on, but we haven't been able to capitalize on that yet, because, frankly, in California, there's just not--it's a very regulatory bias against fossil fuels. That's one of our problems there. And so, if you want to participate in the utility programs there, we were disappointed to learn that they prohibited anything but batteries from being in that demand management that a formal programs where you can get reimbursed by the utilities. This is not--this is just for that--this particular regulatory benefit is happening now. So, that's the kind of headwind we spend in California. So, to answer your question, I think we have a ways to go in order to make hay with this achievement.

Operator: Thank you. We have reached the end of our question-and-answer session, so I would now like to turn the floor back over to Mr. Locke for any additional concluding comments.

Benjamin Locke: I want to thank all of you for your interest in Tecogen, and I look forward to share more news with you on our progress as it occurs. Thank you again.

Operator: Thank you. Ladies and gentlemen, this does conclude today's teleconference. Again, we thank you for your participation, and you may disconnect your lines at this time.