

BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA  
COLUMBIA, SOUTH CAROLINA

HEARING #19-11774

APRIL 30, 2019

10:11 A.M.

ND-2019-2-A:

COLITE INTERNATIONAL — Request for an Allowable Ex Parte Briefing  
Communication Regarding Colite Technologies' Products and Services

**ALLOWABLE EX PARTE  
BRIEFING**

**COMMISSION MEMBERS PRESENT:** Comer H. 'Randy' RANDALL,  
*Chairman*; Justin T. Williams, *Vice Chairman*; and  
COMMISSIONERS Florence P. BELSER and Swain E. WHITFIELD

**STAFF:** Jocelyn Boyd, Chief Clerk/Administrator; Jerisha Dukes,  
Esq., Commissioners' Staff; William O. Richardson, Technical  
Advisory Staff; Rob Bockman, Clerk's Staff; and Jo Elizabeth M.  
Wheat, CVR-CM/M-GNSC, Court Reporter

**APPEARANCES:**

**MARTIN BROWN** [CEO, Colite International] and **KEVIN  
O'HARA** [President/CEO, Colite Technologies] presenting  
on behalf of COLITE INTERNATIONAL

**JEFFREY M. NELSON, ESQUIRE**, appearing as designee of  
the Executive Director of the SOUTH CAROLINA OFFICE OF REGULATORY  
STAFF

---

**PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA**

101 EXECUTIVE CENTER DRIVE  
COLUMBIA, SC 29210

[WWW.PSC.SC.GOV](http://WWW.PSC.SC.GOV)

POST OFFICE BOX 11649  
COLUMBIA, SC 29211

**I N D E X**

	<b>PAGE</b>
<b><u>OPENING MATTERS</u></b> .....	3-6
<b><u>PRESENTATION</u></b> .....	6
Question(s)/Comment by Chairman Randall.....	15, 40
Question(s)/Comment by Commissioner Whitfield.....	16, 20, 24,
.....	30, 35, 46, 56
Question(s)/Comment by Vice Chairman Williams..	22, 41, 43, 60
Question(s)/Comment by Commissioner Belser.....	41, 44
Question(s)/Comment by Mr. Richardson.....	37, 38
Question(s)/Comment by Mr. Nelson .....	52, 54
<b><u>REPORTER'S CERTIFICATE</u></b> .....	64

Please note: Due to the nature of this off-site venue and group tour undertaken as a part of this ex parte briefing, the court reporter was unable to capture intermittent concurrent discussions held between parties during the course of the briefing.

Please note: For identification of any additional referenced materials and/or links for same, please see correspondence to be filed by the Office of Regulatory Staff.

Please note the following inclusions/attachments to the record:

- Presentation Slides and videos/links, as well as brochure materials provided to participants/attendees

P R O C E E D I N G S

1  
2           **CHAIRMAN RANDALL:** We'll call this to order.  
3 I'm going to ask Mr. Jeff Nelson to sort of tell us  
4 the rules of the ex parte.

5           **MR. NELSON:** Thank you. This is odd, because  
6 we're in a different setup here, but still, I just  
7 want to make sure – I'm not even positive this is  
8 an ex parte communication since it's not a  
9 regulated industry, but we'll follow the rules  
10 anyways, just to make sure we're doing everything  
11 right.

12           I'm Jeff Nelson. I'm Chief Legal Officer for  
13 the Office of Regulatory Staff, and I'm here as the  
14 designee of the Executive Director of ORS for this  
15 allowable ex parte that's being conducted by Mr.  
16 Brown, of Colite International, and conducted in  
17 accordance with South Carolina Code Annotated  
18 Section 58-3-260(C).

19           Again, I'm not sure if this qualifies, but  
20 let's act like it does, and say that, as the ORS  
21 representative, it's my duty to certify the record  
22 of this proceeding to the Chief Clerk of the Public  
23 Service Commission, Ms. Jocelyn Boyd, who's sitting  
24 right here [indicating], within the next 72 hours  
25 and verify the briefing was conducted in accordance

1 with the Statute.

2 The requirements of the Statute are, in part,  
3 that the allowable ex parte be confined to the  
4 subject matter which has been noticed in this case;  
5 that is, quote, "Colite Technologies' Products and  
6 Services," end quote. I therefore ask that Mr.  
7 Brown, the Commissioners, anybody here, just please  
8 try and – that's a really broad topic, so I think  
9 that covers just about anything you want to talk  
10 about, but make sure that you confine –

11 **MR. MARTIN BROWN [Colite Internat'l]:** We  
12 will.

13 **MR. NELSON:** – your official statements to  
14 that topic.

15 Under the provisions of 58-3-260,  
16 participants, Commissioners, and Commission Staff  
17 are prohibited from requesting or giving any  
18 commitment, predetermination, or prediction  
19 regarding any action by any Commissioner as to any  
20 ultimate or penultimate issue which either is  
21 before or is likely to come before the Commission.  
22 Again, I don't know if anything here is likely to  
23 come before the Commission but, if it does, we just  
24 make sure that y'all can't ask them for anything  
25 and they can't make a commitment to anything back

1 to y'all.

2 Also, everyone should have signed in. There's  
3 a sign-in sheet back there. Please make sure that  
4 you sign in.

5 Also, if you reference any documents or  
6 anything – I know I've got this packet here  
7 [indicating], but we need to make sure that, if you  
8 specifically reference any documents, that we get a  
9 copy of those, because that's got to be part of the  
10 record that goes forward to the Public Utilities  
11 Review Commission and the Legislature, which is who  
12 this is reported to, ultimately.

13 And that's all I've got. Thank you, very  
14 much. Appreciate it.

15 **CHAIRMAN RANDALL:** Thanks. We know it's –  
16 it's always official if Ms. Jo Wheat is talking  
17 into the little machine, so we know that's right.

18 We want to thank y'all for letting us come  
19 today. We are – you know, we're looking at –  
20 technology's changing, the industry is changing,  
21 the way of delivering electricity is changing. And  
22 we want to see – start looking at being on the  
23 front end of knowledge instead of on the back end  
24 and just catching up. So we appreciate y'all  
25 telling us about you and showing us about the

1 technology that you're involved in.

2 MR. MARTIN BROWN [Colite Internat'l]: Great.  
3 Thank you.

4 CHAIRMAN RANDALL: So I'll turn it over to  
5 you.

6 MR. MARTIN BROWN [Colite Internat'l]: I  
7 appreciate it. Thank you, very much.

8 [Reference Presentation Slide 2]

9 All right. So, our plan of action is we're  
10 going to go through a presentation about Colite  
11 Technologies and our off-grid renewable lighting  
12 products.

13 My name is Marty Brown; I'm the CEO of Colite  
14 International. My brother Pete and I have invested  
15 in a new company, have started a new company about  
16 renewable energy, with Mr. Kevin O'Hara over here  
17 [indicating]. So the three of us are heavily  
18 researching and investing into these new  
19 technologies that we would like to show you today,  
20 in a very broad context. So I'm going to go  
21 through the presentation, we're going to do a plant  
22 tour, and then we're going to go outside for a few  
23 minutes before it gets too hot, and look at one of  
24 our units that are working, so you can actually get  
25 a really good feel of an understanding of the

1 product.

2 So what's really interesting is I looked at –  
3 you know, I was looking at this the other day,  
4 because a lot of our presentations are, you know,  
5 with our customers, but this one I wanted to see,  
6 when you really look at street lighting, parking  
7 lot lighting around the country and around the  
8 world, where did it actually – where did it really  
9 start? Where did it begin? So it was really  
10 interesting to see that 1880 was the first city –  
11 it was Wabash, Indiana – was the first city in the  
12 United States to actually become a lighted –  
13 electrically lighted – city. So think about that,  
14 1880 to now, almost 2020; there are hundreds of  
15 millions of on-grid street lights, parking lot  
16 lights, I mean, and I don't – I think the 300  
17 number is probably low. I mean, there's millions  
18 of millions of them. And all you've got to do is  
19 just drive around: parking lots everywhere. So we  
20 really see that as our opportunity.

21 And what we would like to do is think about –  
22 is how do we create a renewable energy product  
23 that's easy to install, robust, and on a broad  
24 market, whether it's a corporate customer that has,  
25 you know, a thousand-car parking lot versus a

1 municipality building or green space that only  
2 needs two or three lights. So we want to make it a  
3 very broad offering.

4 [Reference Presentation Slide 3]

5 So here's – you know, getting right into it,  
6 this is our product line. We've got a steel  
7 structure designed for high wind speeds. It's  
8 going to have battery storage. So basically we've  
9 got a unit that's solar only, we've got a unit  
10 that's wind. This is called a vertical wind  
11 turbine, wind-to-vertical axis. We've got solar,  
12 we've got lighting, we've got a steel structure for  
13 support, signage maybe, no signage, and we've got  
14 storage and the controller in the base. So the  
15 base unit itself is building a support structure to  
16 hold all this technology.

17 [Reference Presentation Slide 4]

18 So why is this important? So, part of it is,  
19 it's completely off-grid. There's no power bill,  
20 of course. There's no – here's another benefit,  
21 is, there's no trenching. So you think about all  
22 the infrastructure that's in the ground and you  
23 know we're constantly tearing up parking lots;  
24 they're adding lights, they're building lights.  
25 You know, developers are building rows and rows of

1 brand new roads. They've got to run wires,  
2 conduit. They've got to design all those systems.

3 Our product line would completely avoid all  
4 that very expensive infrastructure. And one of the  
5 things that we would bring to the table is,  
6 obviously, there's great federal and state  
7 incentives, tax incentives, to invest in renewable  
8 energy. But, also, our product would be easy to  
9 move in the future. So if somebody's building a  
10 parking lot, they put in our structures and maybe  
11 one day they want to redo that parking lot, move  
12 it, they can just basically unbolt our unit, move  
13 it over. They don't have to re-dig-up the parking  
14 lot. So there's a lot of benefits to being  
15 completely independent and off-grid from the  
16 system.

17 One of the things we want to bring to the  
18 table, we're a sign company. We're very creative;  
19 we've got great designers, we've got an engineering  
20 staff. That's the other thing is – we want to talk  
21 about – is how can we customize the product to  
22 different customers and make it attractive, so it's  
23 not just, you know, a nice big steel pole in here  
24 with a light hanging on the end of it. What can we  
25 do to make it multiple-use products, and that's

1 where you'll see as our presentation goes on.

2 [Reference Presentation Slide 5-6]

3 So part of the system is you're asking, "Well,  
4 wind, solar, what are these guys doing?" So,  
5 Kevin's team, you know, we're hiring in people –  
6 PhD's and engineering, mechanical engineers, you  
7 know, people on the staff that can help analyze  
8 each location. So we're looking broadly outside  
9 this South Carolina market. I mean, we are working  
10 nationally already, and eventually we're looking to  
11 do this product internationally.

12 So one of the things you've got to do is  
13 you've got to analyze what's the average solar,  
14 what's the average wind, and how does our team put  
15 together those numbers for the customer, so when  
16 the customers says, "Okay, I've got a parking lot  
17 in Texas," or, "I've got a parking lot in Florida,"  
18 you know, we can help run the data and run the  
19 calculations so we can ensure the performance of  
20 the product. Because a lot of people, the very  
21 first question they always ask is, "How long is the  
22 battery going to last?" So we want to make sure  
23 the engineering and the support helps eliminate  
24 that question, where – you'll see where we've done  
25 a lot of work on the battery technologies – that

1 will be one of the last questions they ask, because  
2 they see the technology is catching up.

3 But two years ago or even three years ago,  
4 when we really got into this product, we had to  
5 even explain what a renewable-energy light was, so,  
6 you know, think about we're really starting from  
7 scratch. So three years into this, that  
8 conversation is starting to change as people  
9 automatically get it. They understand renewable  
10 energy. Now they've just got to understand "What's  
11 the application? Why would I buy this?"

12 [Reference Presentation Slide 7]

13 So what's really kind of made it a little bit  
14 of a game-changer for us is just the wind turbine,  
15 itself. You know, you've probably seen some – you  
16 know, everybody's familiar with horizontal wind  
17 turbines. They're massive, they're huge, they're  
18 expensive, and they're eye pollution.

19 We wanted to create a product that is  
20 something designed around this turbine for certain  
21 reasons: Number one, it's small. And we'll show  
22 you one on the tour. It's small. It looks  
23 attractive. It works in low wind speeds. The  
24 other thing is, it works in any wind speed. You  
25 know, horizontal wind turbines have to turn into

1 the wind, so that creates a whole complication on  
2 its own. So, you know, the wind is swirling, it's  
3 northwest, southwest, whatever. It doesn't matter  
4 to us. So when you see how we've designed this  
5 into the system and combined with the solar is we  
6 don't have to worry about the calculations of "Oh,  
7 my God, which way is the wind going?" That  
8 eliminates all those questions. So that's part of  
9 the simplicity and the beauty of this system is  
10 we're using integrated parts that make sense. So  
11 solar is proven, wind is proven, the batteries are  
12 proven. We're really integrating these proven  
13 technologies. But the trick is, it's how do you  
14 integrate it and make it work, make the engineering  
15 work, and make it fit to the customer's needs.

16 [Reference Presentation Slide 8]

17 Okay, so, this is when I'm going to get Rich  
18 to pull up – actually, let's go ahead and show the  
19 SCRA video real quick. That'll kind of give you a  
20 feel of our standard product, and then we'll talk  
21 about how, eventually, the wind turbine product and  
22 how we're going to grow that into other markets.  
23 I'll let Kevin talk about that a second.

24 [["SCRA Video"](#) commences]

25 So this is just kind of a nice look of the

1 SCRA driveway when you come in the property.

2 [Video continues]

3 You can see the performance at night. This  
4 new-technology lighting is just pretty impressive.

5 [Video continues to conclusion]

6 So one thing I'll note about that is, think  
7 about, too, this is a retrofit. This park, the  
8 lighting is very old and not working anymore, with  
9 underground wiring problems. So, with the new  
10 performance of LED lighting and photometrics, we're  
11 actually going to end up with less lights in the  
12 park than they designed, you know, 40 years ago.  
13 So, thing about that, too, is it's not just better  
14 opportunities for being off-grid; it's better  
15 opportunities for just less light poles to cover  
16 the same amount of asphalt. So those are part of  
17 the economics of the changes. A lot of customers  
18 say, "Well, I've got 40 poles." Well, when they  
19 come back and replace them, they might only need  
20 30, so that's part of the economics of the cost  
21 savings.

22 I want to talk a little bit about how the  
23 turbines get bigger, and we're going to show you  
24 one of these DS-3000s, 3000 watts.

25 So, Kevin, you want to add any comments about

1 maybe the higher performance?

2 **MR. KEVIN O'HARA [Colite Technologies]:** Well,  
3 the -3000 is kind of more of a pure power-  
4 generation type technology. So it'll be – we're  
5 actually going to be marketing this for distributed  
6 energy production, and it could be either on-grid  
7 or off-grid; there's lots of – or, there's going to  
8 be more and more, when we talk about renewable  
9 distributed-energy resource, interaction with the  
10 existing grid. There is and there will be more.

11 So this product and this technology is kind of  
12 our next evolution, more into the pure power aspect  
13 of it, whether it be, you know, a farm, a home,  
14 small commercial, whatever. We could actually put  
15 these up on rooftops, as well, just like rooftop  
16 solar.

17 And, again, Marty didn't cover it too much,  
18 but there's a very complementary nature between  
19 solar and wind. And when solar tends to be at its  
20 highest level of production in the summer, when the  
21 days are long, the sun is shining high, is when we  
22 know it gets pretty still and balmy and hot, no  
23 wind in South Carolina. So, on the other hand,  
24 when the days are shorter and we have a little bit  
25 more inclement weather during the wintertime,

1 that's when wind production tends to be the  
2 highest. So that's why the combination of wind and  
3 solar is a pretty efficient, effective distributed  
4 renewable source, even for large. So, I mean,  
5 that's kind of where we're headed: We're headed  
6 from lighting to generation, production.

7 **MR. MARTIN BROWN [Colite Internat'l]:** So,  
8 Rich, can we show the –

9 **CHAIRMAN RANDALL:** That sort of changes the  
10 game, too, your design, where –

11 **COMMISSIONER WHITFIELD:** It does.

12 **CHAIRMAN RANDALL:** – you don't have to have a  
13 big windmill out there –

14 **MR. MARTIN BROWN [Colite Internat'l]:** That's  
15 correct.

16 **CHAIRMAN RANDALL:** – and you catch wind from  
17 any direction, and –

18 **MR. MARTIN BROWN [Colite Internat'l]:** Yeah.

19 **MR. KEVIN O'HARA [Colite Technologies]:** And  
20 that is absolutely right.

21 **CHAIRMAN RANDALL:** – below [word inaudible] –

22 **MR. MARTIN BROWN [Colite Internat'l]:** So  
23 we're going to –

24 **CHAIRMAN RANDALL:** So that's sort of a game-  
25 changer.

1                   **MR. KEVIN O'HARA [Colite Technologies]:** The  
2                   difference, though, is it's much smaller scale.  
3                   Those things are producing 5, 6, maybe 8 now, 10  
4                   megawatts, as they get bigger –

5                   **CHAIRMAN RANDALL:** Yeah.

6                   **MR. KEVIN O'HARA [Colite Technologies]:** – and  
7                   bigger. We're at 3000 watts, you know.

8                   **CHAIRMAN RANDALL:** Yeah.

9                   **MR. KEVIN O'HARA [Colite Technologies]:** So  
10                  our applications are going to be smaller, and the  
11                  economics are going to be different. So we're  
12                  moving from a wholesale level down to a more  
13                  distributed retail level, so the economics are just  
14                  different.

15                  **COMMISSIONER WHITFIELD:** Is this your product,  
16                  or are you getting that from another third-party?

17                  **MR. MARTIN BROWN [Colite Internat'l]:** We're  
18                  buying it from a partner. So, it's actually  
19                  designed and built in Taiwan.

20                  **COMMISSIONER WHITFIELD:** Taiwan, okay. I was  
21                  going to say, I knew you were doing some great  
22                  things, but if you had both the –

23                  **MR. MARTIN BROWN [Colite Internat'l]:** Well,  
24                  you know, long term –

25                  **COMMISSIONER WHITFIELD:** But you're buying – I

1 mean, that DS-3000, these – that's – you're buying  
2 that from Taiwan.

3 **MR. MARTIN BROWN [Colite Internat'l]:**

4 Correct. Correct. So that's one of the components  
5 we're integrating, correct.

6 **MR. KEVIN O'HARA [Colite Technologies]:** And  
7 we are the distributor for North America and  
8 several other markets where we have global  
9 partners.

10 **MR. MARTIN BROWN [Colite Internat'l]:** Yeah.

11 **MR. KEVIN O'HARA [Colite Technologies]:** So  
12 it's kind of – it's kind of our US product but  
13 we're representing a third party, the manufacturer.

14 **MR. MARTIN BROWN [Colite Internat'l]:** Yeah,  
15 so Rich – I want to show you this interesting  
16 video. So this is the largest "small" – quote,  
17 unquote – wind farm in the world, and this is in  
18 Taiwan.

19 [Video "Changhua Wind Farm" commences]

20 It's on 15 acres. It's 400 units, the  
21 DS-3000. And that's 1.2 megawatts, so that's  
22 interesting. It kind of gives you a nice  
23 interesting view against the larger turbines in the  
24 background.

25 [Video continues]

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

**MR. KEVIN O'HARA [Colite Technologies]:**

Another really interesting concept is the dual use of the property. This is a fish farm.

[Video concludes]

It's a commercial fish farm that they put these turbines on, so that they could get both the revenue from the production of electricity and its natural use, which was raising fish.

**MR. MARTIN BROWN [Colite Internat'l]:** So the thing about this, though, there are opportunities for much smaller farms. And we've got representation in the Caribbean; we're looking for markets where costs are superhigh and the difficulty is there's no way they can install large turbines. So think about it: We're creating jobs in South Carolina that are engineering jobs, project management, logistics. So, you know, again, going to your point [indicating] is we're looking behind our normal markets for products that work – batteries, lights, turbines – but we're really building an infrastructure and a team of people are located in South Carolina.

So, in some ways, we're creating higher-paying jobs, but they're very technical, so as you'll see we're building a team of very, very technically

1 minded people, and the training. So it's kind of  
2 interesting how we're going to integrate these  
3 technologies into solutions either for our  
4 customers or new markets that we don't have,  
5 currently.

6 Okay, so let's keep going. We've got to watch  
7 our time.

8 [Reference Presentation Slide 9]

9 So here's really interesting. So, Kevin's  
10 team is – part of it is, lighting is critical; it  
11 really wants a certain amount of foot-candles. So,  
12 what we've really done is created a motion-sensing  
13 light. We'll talk about it outside when we go out  
14 there. And we can deliver higher wattage when we  
15 need it; and at night, when you think about it, if  
16 you drive around, what's going on from midnight to  
17 5 a.m. in most of the world is, you know, lots of  
18 lights on empty parking lots and asphalt. So part  
19 of our strategy is to help the customers in their  
20 renewable energy understanding, is, not only are  
21 our lights off-grid; there's less light pollution,  
22 and there's less just general waste.

23 So this lighting can deliver very high foot-  
24 candles when the customers need it, from, you know,  
25 dark till midnight, but then motion-sensing when

1 the parking lots aren't much in use. It just makes  
2 sense, but not many people are doing it. It's  
3 incredible. So, they put a 500-watt – a 400-watt  
4 light, and they're lighting asphalt all night long  
5 at 10 foot-candles. It makes no sense. So that's  
6 part of our strategy, is educating customers on  
7 what else is available.

8 **COMMISSIONER WHITFIELD:** You're saying it'd be  
9 off during –

10 **MR. MARTIN BROWN [Colite Internat'l]:** It'll  
11 dim down.

12 **COMMISSIONER WHITFIELD:** Dim down, but if  
13 somebody walks in the area, you've got – it –

14 **MR. MARTIN BROWN [Colite Internat'l]:**  
15 Automatically turns up.

16 **COMMISSIONER WHITFIELD:** So like so a lady  
17 needing light to walk to her car, it would  
18 automatically light up?

19 **MR. MARTIN BROWN [Colite Internat'l]:**  
20 Absolutely. Yeah. And it goes so fast, your eye  
21 can barely detect the wattage increase. It's just  
22 amazing. It's not like just this big flash; the  
23 light dims up very slowly – very – well, quickly,  
24 but almost imperceptible to your eye. Okay?

25 **MR. KEVIN O'HARA [Colite Technologies]:** And

1 the way we characterize this, at the lower levels,  
2 say, at 2 a.m., we're providing security lighting,  
3 which is a lower-level lighting. When you have  
4 some activity, it's safety lighting. It goes up to  
5 the highest level.

6 **MR. MARTIN BROWN [Colite Internat'l]:** Okay.

7 So part –

8 [Reference Presentation Slide 10]

9 – of our growth, then, our – when you really  
10 think of the big picture – even like South  
11 Carolina, but outside of South Carolina – our goal  
12 is to sort of bring this technology, you know, to  
13 hotel markets, retail. Even, you know, petrol  
14 stations in the future where they're going to be  
15 charging cars. Corporate. So the key is – you  
16 know, when you really think about it, it's not just  
17 thinking about, "Oh, what are the number of parking  
18 lots out there?" I mean, the number of privately  
19 owned parking lots is massive marketing, so how do  
20 we tap into that? I mean, think about the  
21 opportunities when you really think about how much  
22 parking spaces are out there, government-owned  
23 parks, and green spaces. It's really tremendous.

24 [Reference Presentation Slide 11]

25 So our goal is to figure out how do we – we

1 have the base engineering, but then how do we  
2 convince the customers and future customers that  
3 they have the ability to customize the design to  
4 their liking? So it might be that a green river  
5 walkway could have very, very interesting designs,  
6 where maybe if it's just more an industrial parking  
7 space that nobody ever sees, they don't need any  
8 designs at all; they just need a pole and a light.  
9 But our goal is: The engineering is standard, the  
10 system is standard, but because we're a custom sign  
11 shop, manufacturing company, we can design it to  
12 whatever their needs are. If they really want it  
13 fancy, we can do it; if they really want it ornate  
14 and painted in special colors, we can do it. So  
15 that's what we want to do, is we want the units to  
16 be attractive and we want it to be practical.

17 **VICE CHAIRMAN WILLIAMS:** Quick question for  
18 you. The units that you have at the entrance of  
19 this facility, are they connected to the grid?

20 **MR. MARTIN BROWN [Colite Internat'l]:** Totally  
21 off-grid, yeah.

22 **VICE CHAIRMAN WILLIAMS:** So for this product,  
23 say you go into a Walmart parking lot – just off  
24 the top of my head. Would the goal be that this  
25 lighting would never be connected to the grid?

1                   **MR. MARTIN BROWN [Colite Internat'l]:** That's  
2                   the goal.

3                   **VICE CHAIRMAN WILLIAMS:** What if a customer,  
4                   say, wanted that possibility as a backup? Like,  
5                   "Whether we use it or not, we at least want to be  
6                   hooked up"?

7                   **MR. MARTIN BROWN [Colite Internat'l]:** So,  
8                   it's a great question. So this unit [indicating],  
9                   we're going to go out there and see it. So, this  
10                  is our DS-300, 300 watts. This unit can only be  
11                  off-grid for technical reasons. There's a little  
12                  bigger unit called the DS-700, and there will be  
13                  potential for that – correct me, if I'm wrong – but  
14                  that could be an on-grid solution, on-grid/off-  
15                  grid, but you have to go with this different unit,  
16                  so...

17                  **MR. KEVIN O'HARA [Colite Technologies]:** We  
18                  haven't run into that yet. And technically that  
19                  [indicating] turbine can't be connected to the grid  
20                  and providing electricity to the grid – okay? –  
21                  just the way it's technically designed.

22                  We haven't really had the question, but  
23                  there's no – there's no technical reason why we  
24                  can't find a way to shut off the interaction, have  
25                  some kind of switch which allowed that backup to

1 exist. So I would never say we can't do it,  
2 because we've got some pretty strong technical  
3 minds. And solar-only is simple; you know, we can  
4 have a grid backup and have it interacting with our  
5 controller. And my guess is we could create some  
6 kind of switch to completely isolate the turbine in  
7 a situation where the customer wanted that.

8 But part of the benefit is not trenching, not  
9 wiring. And, you know, if you do that, you might  
10 as well just put an electrical pole up.

11 **MR. MARTIN BROWN [Colite Internat'l]:** Right.

12 **COMMISSIONER WHITFIELD:** If I could, I'm gonna  
13 – and Mr. Nelson and Jocelyn, stop me if you need  
14 to. But going to where Commissioner Williams was  
15 just going to, the Commission has programs in what  
16 we call DSM and EE – demand-side management and  
17 energy efficiency – and some of the large  
18 customers, industrial, have an opt-out clause in  
19 that DSM – demand-side management – program that is  
20 already a Commission certified program, if you  
21 will, Statewide. And anyway, where Commissioner  
22 Williams was going with that, that Walmart may  
23 already have opted out. So be it not being on the  
24 grid, if they're an opt-out, in other words, they  
25 may have already – that – we have some large

1 customers who do choose to opt out of the DSM  
2 program, so that could factor into what we do a  
3 little bit.

4 I don't know if I was out of bounds in saying  
5 that, but nonetheless, it's -

6 **MR. NELSON:** You weren't promising them  
7 anything, were you?

8 **COMMISSIONER WHITFIELD:** No, I wasn't  
9 promising anything.

10 [Laughter]

11 No, I just said it could be an issue that  
12 could be we have to deal with one day.

13 **MR. KEVIN O'HARA [Colite Technologies]:** Are  
14 they opting out because they're buying their energy  
15 through other purchased power?

16 **COMMISSIONER WHITFIELD:** No, they're opting  
17 out because they have their own - they have their  
18 own demand-side management and their own energy-  
19 efficiency program.

20 **MR. KEVIN O'HARA [Colite Technologies]:** I  
21 see.

22 **COMMISSIONER WHITFIELD:** They're opting out  
23 because they think they can do better.

24 **MR. MARTIN BROWN [Colite Internat'l]:** I  
25 gotcha.

1                   **MR. NELSON:** Walmart is incredibly energy  
2 efficient because it's such a large cost to them,  
3 so –

4                   **COMMISSIONER WHITFIELD:** And Commissioner –

5                   **MR. NELSON:** – they always opt out.

6                   **COMMISSIONER WHITFIELD:** Right, well, and when  
7 Commissioner Williams used that as an example, so I  
8 just...

9                   **MR. KEVIN O'HARA [Colite Technologies]:**  
10 Right.

11                   **MR. MARTIN BROWN [Colite Internat'l]:** Okay.

12                                   [Reference Presentation Slide 12]

13                   You're going to see this unit outside, too.  
14 So, here's where Kevin talked about solar-only. So  
15 we've got different product lines, and this is for  
16 a variety of different applications, when the  
17 lighting we're using isn't needed for the wind. So  
18 there are many scenarios where we can create this  
19 nicer looking solar unit; it's got a lower-wattage  
20 lighting. You've still got the dimming options,  
21 the motion sensing, but it allows – this is really  
22 very – this kind of product line would be great for  
23 green spaces, you know, parks, neighborhoods, you  
24 know, a variety of areas where you don't need a 30-  
25 foot pole with a wind turbine. So we want to make

1           sure we have a product line that's different price  
2           ranges, but also for different applications.

3           And you can see here, you know, this is where  
4           you can sort of get into some more interesting  
5           designs based on the customers' needs and what they  
6           want. So we'll take a look at this unit when we go  
7           outside.

8                           [Reference Presentation Slide 13]

9           So, and then, as far as other opportunities,  
10          you know, because we're basically creating power,  
11          we're looking at a variety of applications where  
12          our customers want Wi-Fi boosters, you know,  
13          security cameras, and a variety – you know, maybe a  
14          park bench with a phone charging port for, you  
15          know, young millennials to sit around and charge  
16          their phones.

17          And so, I mean, if you want to add anything to  
18          that...

19                   **MR. KEVIN O'HARA [Colite Technologies]:** Or  
20          old men, like us.

21                   **MR. MARTIN BROWN [Colite Internat'l]:** Yeah.

22                           [Laughter]

23                   **MR. KEVIN O'HARA [Colite Technologies]:** We  
24          have to charge our phones, too. But we've just  
25          entered a partnership with Statewide Security

1 Systems, and they provide monitoring technology to  
2 many of the law enforcement agencies in South  
3 Carolina. And just like any other potential  
4 application like that, putting a new camera in a  
5 particular area could be cost-prohibitive from an  
6 electrical-grid standpoint. So, unfortunately –  
7 and I – do you have some pictures of the new –

8 **MR. MARTIN BROWN [Colite Internat'l]:** Do we  
9 have that Richie, or not?

10 **MR. BERGER:** I don't think so, no.

11 **MR. MARTIN BROWN [Colite Internat'l]:** I think  
12 there's a slide on it.

13 **MR. KEVIN O'HARA [Colite Technologies]:** We  
14 literally just had one of the new –

15 [Reference Presentation Slide 14]

16 **MR. MARTIN BROWN [Colite Internat'l]:** Yeah,  
17 there.

18 **MR. KEVIN O'HARA [Colite Technologies]:** Yeah,  
19 there we go. That's the unit, actually. This is  
20 their unit. And as tragic as it is, these cameras  
21 caught the footage of the recent abduction of the  
22 young lady in South Carolina, and also the gunfire  
23 this weekend in Five Points. So his units, exactly  
24 like this, are all over the city, and he provides a  
25 service to the city to provide the forensic

1 analysis of the footage when an event like that  
2 occurs.

3 And now we've partnered up with him so that we  
4 can basically plop this thing down anywhere. We  
5 put this up in less than a week. The Sheriff of  
6 Richland County calls him and says, "I want a  
7 unit," so-and-so, "tomorrow." Okay? It took us a  
8 few days. But we dug it up, we moved it – because  
9 that's our pilot unit at the moment, and we've got  
10 several more coming for those kinds of pilot  
11 applications. But this is the most recent, and  
12 this is going to, I think, provide a lot of  
13 opportunity for him to put these units in places  
14 where they couldn't be put before, and for law  
15 enforcement agencies to extend their eyes.

16 [Reference Presentation Slide 15]

17 We really think the university markets and  
18 school markets is a huge opportunity for this kind  
19 of product, because, again, they can dress it up.  
20 You know, they can put some nice features to it,  
21 but put it in a university setting. You know, if  
22 you're in the horseshoe, they can't dig up – they  
23 can't dig up to get a wire there, and they  
24 certainly don't want to run over-lines. So it's  
25 one of those practical applications that's solving

1 a problem. And that's part of our interest. You  
2 know, we're not a mass-market thing; we're really  
3 looking at problem-solving for certain customers  
4 and giving them what they want.

5 **COMMISSIONER WHITFIELD:** So the ones in Five  
6 Points were one of your –

7 **MR. MARTIN BROWN [Colite Internat'l]:** No,  
8 those are all on-grid, but that's the company.

9 **COMMISSIONER WHITFIELD:** Those are on-grid.

10 **MR. MARTIN BROWN [Colite Internat'l]:** So,  
11 that's the company that owns this unit.

12 **COMMISSIONER WHITFIELD:** Oh, same company.

13 **MR. MARTIN BROWN [Colite Internat'l]:** But his  
14 vision is to market for these kind of off-grid  
15 applications is tremendous, and it's easier for  
16 them to just go put them in on some private  
17 property versus trying to get it on-grid. It's  
18 just easier.

19 [Reference Presentation Slide 16]

20 So, then, I think basically, you know, part of  
21 our thing is, you know, there's federal tax  
22 incentives, state tax incentives, there's  
23 accelerated depreciation. There's a lot of good  
24 benefits about investing in green energy. So  
25 there's a lot of good things for our customers

1 we're bringing to the table, and we're helping  
2 them, helping educate them on what the  
3 opportunities are. And, you know, we're learning  
4 all the time; every state is different. It's  
5 pretty complicated. You know, when you really look  
6 at – I mean, we're doing quotes all the way to  
7 California, so, I mean, it's – I mean, and there's  
8 – I don't know how many districts in California.  
9 So it's a very, very complex system to figure out.  
10 I don't know if we've got it totally figured out,  
11 but we're learning how to figure it out.

12 [Reference Presentation Slide 17]

13 So what's really – also is interesting is I  
14 was talking to somebody on a project, and they were  
15 like, "Ah, you know, street light, parking lot  
16 lights. Like, who cares, you know what I mean? I  
17 worry about my building." And I was like, "Okay.  
18 Well, fine. But if you look at the potential CO<sub>2</sub>  
19 savings of one on-grid parking lot light that's  
20 changed out, and then look at those numbers 28  
21 times over 25 years, okay, well, that is a lot.  
22 But now multiply it by 100 million, 200 million,  
23 300 million." It's a huge number. And eventually,  
24 people are going to see that the parking lots are  
25 important, the street lights are important. It's a

1 big number. It's just nobody's really paying  
2 attention to it; everybody's maybe focused on, you  
3 know, a lot of other things, but we're focusing in  
4 on this market, and it's big. It's a big, big  
5 market, and it's been really pretty much neglected.

6 [Reference Presentation Slide 18]

7 And here's just some nice pictures of where  
8 we've kind of come from over the last couple of  
9 years, really, three years, developing where we are  
10 today. You know, this is our test unit at The  
11 Electric Cooperatives; Mike Couick, his team has  
12 been great to work with. They're analyzing the  
13 data with a little minicomputer, and so they –  
14 they're proving out what we're telling them.  
15 They're on loan; they're analyzing the data, and  
16 we're not selling them anything. They're selling  
17 themselves. They're doing it and checking what  
18 we're saying.

19 So their unit is there on their property in  
20 West Columbia. We've had a test unit at the  
21 Clemson Wind Institute in Charleston for a while.  
22 They're doing the same thing. They've got a lot of  
23 smart graduates there and PhD's, working, and  
24 they're analyzing the data themselves. So the wind  
25 in Charleston is really good, so they're getting a

1 lot different readings than we would in West  
2 Columbia.

3 And then here's our units, of course, at the  
4 South Carolina Research Authority; it's been,  
5 really, our launch customer, and they've been a big  
6 supporter of this kind of technology.

7 **MR. KEVIN O'HARA [Colite Technologies]:** And  
8 you may have seen some construction activity when  
9 you came in. We're installing six more, as we  
10 speak.

11 **MR. MARTIN BROWN [Colite Internat'l]:** Yeah.  
12 [Reference Presentation Slide 19]

13 Oh, that's the video Rich already showed you.  
14 So, we will make sure, you know, we make this  
15 presentation available.

16 And then the other thing is, we're – the next  
17 extension is, how do we use what we're learning  
18 about technology and solar – solar technology, you  
19 know, EV charging? I mean, the market is changing  
20 rapidly. So there's more and more opportunities  
21 for companies like us, or technology, and how do  
22 you make that technology work for the customer. So  
23 we partnered with a company in North Carolina; they  
24 offer on-grid solar EV charging. That's the next  
25 step, is how do we take that to our customers? How

1 do we develop it, how do we educate people? So  
2 it's just huge, huge opportunities.

3 [Reference Presentation Slide 21]

4 Yeah, this is going to be interesting because  
5 eventually, you know, electric cars are going to be  
6 everywhere, so how do customers manage that?

7 So, let's see.

8 [Reference Presentation Slides 22, 23, 24]

9 All right. So that's the end of our  
10 presentation. Rich, what was the last thing we  
11 were going to show over there?

12 **MR. BERGER:** We had just a slide of the carbon  
13 savings.

14 **MR. MARTIN BROWN [Colite Internat'l]:** Oh,  
15 okay. Yeah, so we covered that. So, yeah. So  
16 that's really what we wanted to talk to you in the  
17 broad array of what we're working on at Colite.

18 It's a quarter til 11, so what we were going  
19 to do is do a plant tour, show you a few things,  
20 and then just step outside, just to let you see the  
21 product. It's really different when you really get  
22 a chance to see them up close and personal, and  
23 understand the construction and the engineering  
24 that really goes into it.

25 And so I don't know if there's any questions

1 or how you guys –

2 **COMMISSIONER WHITFIELD:** One more, safety-  
3 related. We touched on it. You were talking about  
4 the parking lot, how – I think I saw in the slide  
5 where, after no motion, that the lights – after 30  
6 seconds, they went out or on dim?

7 **MR. MARTIN BROWN [Colite Internat'l]:** Dimmed  
8 down.

9 **COMMISSIONER WHITFIELD:** But how about in the  
10 reverse, if – and I mentioned that lady in the  
11 parking lot, gets out of her car. Does it take a  
12 full 30 seconds to come back up, or –

13 **MR. MARTIN BROWN [Colite Internat'l]:** No

14 **COMMISSIONER WHITFIELD:** – is it –

15 **MR. MARTIN BROWN [Colite Internat'l]:** Almost  
16 instant.

17 **COMMISSIONER WHITFIELD:** – instant?

18 **MR. KEVIN O'HARA [Colite Technologies]:** I was  
19 just – I just went to check out some of our units  
20 that we installed in Greenville. I was just there  
21 last week. And I tested – I went early in the  
22 morning, when their shift – before their shift was  
23 changing. They're basically 24 hours a day, so  
24 they have shift change when this is really  
25 important. So they were very happy with it.

1                   **COMMISSIONER WHITFIELD:** Right.

2                   **MR. KEVIN O'HARA [Colite Technologies]:** And I  
3 specifically walked to every single one, and you  
4 can just make it – they come right on.

5                   **COMMISSIONER WHITFIELD:** Right away. Okay.

6                   **MR. KEVIN O'HARA [Colite Technologies]:**

7 Absolute, yeah.

8                   **MR. MARTIN BROWN [Colite Internat'l]:** So,  
9 it's never dark.

10                  **COMMISSIONER WHITFIELD:** I gotcha. Gotcha.

11                  **MR. MARTIN BROWN [Colite Internat'l]:** And  
12 what's really interesting is you think about like  
13 our on-grid parking lot out here. Averages around  
14 two foot-candles of lighting, you know, when our  
15 lights are on. So we can easily deliver, you know,  
16 safety lighting, from one foot-candle to probably  
17 up to five or six. So, I mean, it's as bright as  
18 on-grid; you would never even really notice the  
19 difference. You know, because by quoting hotels  
20 and other areas, we've got to be very aware about  
21 what you're saying. Correct.

22                  **MR. KEVIN O'HARA [Colite Technologies]:** It's  
23 regulated for hotels and also –

24                  **COMMISSIONER WHITFIELD:** Oh, really?

25                  **MR. KEVIN O'HARA [Colite Technologies]:** Yeah,

1 and also ATMs have a specific –

2 **MR. MARTIN BROWN [Colite Internat'l]:** A  
3 certain amount of foot-candles.

4 **MR. KEVIN O'HARA [Colite Technologies]:** So we  
5 have to pay close attention to that.

6 **MR. RICHARDSON:** Of course, they meet the  
7 National Electrical Code?

8 **MR. MARTIN BROWN [Colite Internat'l]:** Oh,  
9 yeah, they're UL approved, so, absolutely. Even  
10 though they're technically – if you're off-grid,  
11 you don't have to have UL approval, but we do.

12 **MR. KEVIN O'HARA [Colite Technologies]:** And  
13 our vertical-axis wind turbine is the only – to get  
14 federal credits, you have to be certified by, I  
15 can't remember the –

16 **MR. MARTIN BROWN [Colite Internat'l]:** SWCC?

17 **MR. KEVIN O'HARA [Colite Technologies]:** SWCC.  
18 Small Wind –

19 **MR. MARTIN BROWN [Colite Internat'l]:**  
20 Certification Council.

21 **MR. KEVIN O'HARA [Colite Technologies]:**  
22 – Certification Council. And it's pretty stringent  
23 and it's a specific IEC code. We're actually –  
24 this turbine is certified in the UK and Japan, and  
25 we're in the very, very final stages of getting

1 that certification in the US, to finish it up.  
2 But, again, you know, that's a critical piece of  
3 our position, of our technology, and I think of our  
4 uniqueness in the market, because you just can't  
5 get this anywhere.

6 **MR. RICHARDSON:** This is strictly DC, right?

7 **MR. KEVIN O'HARA [Colite Technologies]:** It is  
8 strictly DC operating – we are 12 or 24 volts. We  
9 do occasionally, on the larger light fixtures, have  
10 48 volts. The batteries operate at 12 and 24  
11 volts. So sometimes we have DC-to-DC inverters  
12 that we use in the system, but all that is how we  
13 design and set it up. But everything is. The  
14 fixture's DC, the battery, the turbine, the solar  
15 panels, they're all functioning as DC. We now have  
16 a little tiny monitoring system, which is a little  
17 small microcomputer and then a cellular  
18 communication device, so we can actually capture,  
19 communicate, and analyze the data from the units.  
20 And all that's also DC.

21 **MR. MARTIN BROWN [Colite Internat'l]:** So,  
22 want to do a plant tour?

23 **CHAIRMAN RANDALL:** [Nodding head.]

24 **MR. MARTIN BROWN [Colite Internat'l]:**  
25 Perfect.

1 [WHEREUPON, the presentation relocated to  
2 and continued in the manufacturing area  
3 of Colite Technologies as follows  
4 hereinafter]

5 MR. MARTIN BROWN [Colite Internat'l]: So  
6 we're going to go over here, start over here  
7 [indicating].

8 So, this is one of the DS-300s, so it gives  
9 you a chance to really see the technology, how  
10 simple and smart the design is. So the original  
11 design was actually originally designed in Finland,  
12 in the '20s. So it's called a symonious and  
13 aerious design, which is the inner scoops, you call  
14 it. That's how it captures the wind. That's when  
15 they were talking about the low wind speeds that  
16 get the product moving, but the outside turbine  
17 blades is really when you start picking up. They  
18 call it cutting speed, which is 45 miles an hour.  
19 And then what they talk about rated speed is about  
20 10 to 12.

21 So the design is very simple, and one thing I  
22 failed to tell you was what's really great design  
23 about this product is, when the wind speeds are  
24 over 35 miles an hour, it's got an automatic  
25 electronic braking system to slow it down so it

1 doesn't destroy itself, and in really bad weather,  
2 80 mile-per-hour winds. So we've been here a  
3 couple of times when winds were 45 miles an hour  
4 gusts, and it's barely moving. So that's another  
5 built-in feature for long-term security of the  
6 product. It's not going to destroy itself in a  
7 hurricane. And that's why we've engineered the  
8 pole design for 150 mile-an-hour wind speeds,  
9 because the hurricane is going to blow the pole  
10 over, so as long as the pole is there, we know the  
11 product is going to be there. So because of its  
12 design and use in Asia – you know, they've got  
13 cyclones, they've got their own weather problems,  
14 so they designed it to be very robust.

15 **CHAIRMAN RANDALL:** Well, where you've got  
16 that, even if the grid is down, you've still got  
17 lights.

18 **MR. MARTIN BROWN [Colite Internat'l]:** That's  
19 really the selling point is, we're supposed to be  
20 working when the grid is not.

21 **MR. KEVIN O'HARA [Colite Technologies]:** In  
22 all actuality, in the middle of a hurricane we  
23 don't worry about the performance of the turbine,  
24 but I worry about flying objects, you know.

25 **CHAIRMAN RANDALL:** Oh, yeah.

1                   **MR. KEVIN O'HARA [Colite Technologies]:**

2                   That's what'll damage this. So, the nice thing is  
3                   we've designed a very quick and easy release, so  
4                   the customer can choose or they can hire us to come  
5                   and remove these components in the event of a storm  
6                   coming, bearing on us. And literally after the  
7                   storm, they can be back up and running and  
8                   generating like that [indicating].

9                   **COMMISSIONER BELSER:** What size unit would  
10                  this be?

11                  **MR. MARTIN BROWN [Colite Internat'l]:** This is  
12                  the DS-300, and this is the one you saw on the  
13                  lights coming into the property.

14                  **COMMISSIONER BELSER:** So it's the -300.

15                  **MR. MARTIN BROWN [Colite Internat'l]:** The  
16                  -300, so this is the smallest, and the biggest is  
17                  the -3000.

18                  **VICE CHAIRMAN WILLIAMS:** Did you say this was  
19                  designed in the 1920s?

20                  **MR. MARTIN BROWN [Colite Internat'l]:** The  
21                  original patent on symonious and aerious design was  
22                  in the 1920s, believe it or not.

23                  **COMMISSIONER WHITFIELD:** Wow.

24                  **MR. MARTIN BROWN [Colite Internat'l]:** So very  
25                  amazing. So what's really cool, too, about this

1 design: All aluminum anodyne, so no rusting of the  
2 product. You know, it's – like Kevin said, the  
3 connections are very simple. If you have to  
4 replace something, very, very easy to maintain.

5 **MR. KEVIN O'HARA [Colite Technologies]:** There  
6 are actually two separate turbine elements, and  
7 that's what makes this particular one unique is our  
8 supplier actually combined the two and made it in  
9 an efficient certifiable way.

10 **MR. MARTIN BROWN [Colite Internat'l]:** Okay.  
11 So let's go [indicating]. So you see, in our  
12 normal production facility, we've got every skill  
13 that you can think of – welding, painting, you  
14 know, metal cutting, plastic cutting. So that's  
15 what kind of gives us a unique feature about this  
16 product line, too, is, again, our ability to  
17 customize it to the customers' needs, and very  
18 simple to very complex. We really see a lot of the  
19 products – we've seen some solar-only lights that  
20 are in the market that they just are, my opinion,  
21 very unattractive and really very unreliable.

22 [Indicating.] So you can see here this is one  
23 of the DS-3000s. We've got two of them here, just  
24 looking for the right opportunity to use it. But  
25 like Kevin said, we're working on the

1 certification, so that's critical.

2 But here [indicating] is the column.

3 **VICE CHAIRMAN WILLIAMS:** It's much bigger.

4 **MR. MARTIN BROWN [Colite Internat'l]:** It's  
5 bigger, and look at the blades. So when it's  
6 installed, it's 10-foot diameter and 10 feet tall.  
7 So to give you an idea, typically in a small farm –  
8 wind farm application – it'll go on a 30-foot pole.  
9 So it's not, you know, way up in the air where  
10 people are going to see it all the time; it's just  
11 going to be high enough to get into the wind  
12 currents.

13 What's really amazing is when you look at the  
14 blades, you look at how they designed and built  
15 these aluminum blades, pretty cool product. Pretty  
16 amazing. What's also interesting about this one  
17 is, since it is more widely used in Asia right now,  
18 they have designed an actual – that cable, there,  
19 when you put it on a pole, it's got a real locking  
20 mechanism. So in the case of a bad opportunity or  
21 a bad storm coming up, you can go physically break  
22 it. It's an actual break.

23 **COMMISSIONER BELSER:** Is this the top or the  
24 bottom?

25 **MR. MARTIN BROWN [Colite Internat'l]:** That's

1 the bottom where they'll slide down the pole. So,  
2 it tapers to the top.

3 **COMMISSIONER BELSER:** I couldn't believe it  
4 was top-heavy, but I was checking.

5 **MR. MARTIN BROWN [Colite Internat'l]:** So what  
6 happens is, you see these sort of three-way multi-  
7 connections. These end up sliding on the pole, and  
8 that's how the blades end up, you know, fitting  
9 into the connectors. So still pretty much  
10 relatively a plug-and-play system. It's not really  
11 - it's easy to replace the parts. If you ever have  
12 to maintain it, it's relatively easy to take apart.

13 So now, we'll go outside and look at one of  
14 the light units. It's probably getting pretty warm  
15 today, so we'll keep that short and sweet, and then  
16 reconvene in the room and we'll be done.

17 All right. So, we're going to go out the  
18 side. So the alarm will go off, so we'll just kind  
19 of go through anyway [indicating].

20 [WHEREUPON, the presentation relocated to  
21 and continued in the parking area outside  
22 of Colite Technologies as follows  
23 hereinafter]

24 **MR. MARTIN BROWN [Colite Internat'l]:** All  
25 right. Of course, no wind.

1                   **COMMISSIONER BELSRE:** Blow. Everybody blow.

2                   **MR. MARTIN BROWN [Colite Internat'l]:** So,  
3                   that's a DS-300. This is the typical unit, the  
4                   base unit that we talked about in the presentation.  
5                   It's the same unit that is used at the SCRA  
6                   entrance. This is the typical steel pole, signage,  
7                   that's got the 200-watt LED light, solar panel, and  
8                   the standard unit. So the pole can be adjusted,  
9                   you know, for height and engineering. But that  
10                  pole is one of the originals, so the engineering  
11                  has been – we slimmed down the pole just a little  
12                  bit to six inches. That's an eight-inch pole. But  
13                  basically that's the base unit. And it'll be  
14                  modified to the customer's liking and designs.

15                  That one actually happens to have a Wi-Fi  
16                  booster on it that we're testing, that comes from  
17                  our window to here, and then we shoot it down to  
18                  that one [indicating]. So, like a university  
19                  setting, if they wanted Wi-Fi out in a big old  
20                  field, they could put these transmitters on there  
21                  and have Wi-Fi out there.

22                  So then we've got a solar-only unit down here,  
23                  and that'll be it.

24                  [Indicating.] So, this is the solar-only unit  
25                  we mentioned in the presentation, that deals with

1 different applications. Maybe they're smaller  
2 parking lots, pedestrian trails, maybe  
3 neighborhoods where you don't need a big 30-foot  
4 pole.

5 So, again, showing relatively the same  
6 engineering, and we put all the pole support,  
7 battery box, and then the graphics can be  
8 customized to the customer. So the solar on top,  
9 of course – solar is always oriented to the south-  
10 southwest, I guess is typical, so that's always  
11 going to be critical. But now the alignment is  
12 set, but, again, just kind of showing that it's a  
13 very, very practical product, easy to install, but  
14 also the solar is going to create enough power in  
15 certain applications that the wind would be  
16 basically overkill.

17 Yep, all right? So that's it, really.

18 **COMMISSIONER WHITFIELD:** What are you doing  
19 with your current – for your current storage  
20 [indicating]? I know you were talking about  
21 looking for more into batteries.

22 **MR. MARTIN BROWN [Colite Internat'l]:** Battery  
23 technologies. So –

24 **COMMISSIONER WHITFIELD:** What are you doing  
25 like now, currently, with like a unit like that?

1                   **MR. MARTIN BROWN [Colite Internat'l]:** So,  
2 we've got a – it's Trojan batteries, is one of the  
3 suppliers. It's basically up to, what, 205 amp?

4                   **MR. KEVIN O'HARA [Colite Technologies]:** 205-  
5 amp power, which is the equivalent of about 2200-  
6 2300 watt-hours. And just to do the simple math, I  
7 mean, if we're running a 100-watt light and, say,  
8 it's averaging 40 watts over 10 hours at night,  
9 it's basically 400 watt-hours.

10                  **COMMISSIONER WHITFIELD:** Yeah.

11                  **MR. KEVIN O'HARA [Colite Technologies]:** So  
12 then if we have a 2200 – we can essentially – the  
13 light – and this is what we really try to focus on,  
14 is three to five days of pretty much autonomous  
15 operation with no additional energy, which is  
16 never.

17                  **COMMISSIONER WHITFIELD:** Never.

18                  **MR. KEVIN O'HARA [Colite Technologies]:** Okay?  
19 So even on the worst days when it's raining like  
20 crazy –

21                  **COMMISSIONER WHITFIELD:** Four or five cloudy  
22 days, or something, in a row, or –

23                  **MR. MARTIN BROWN [Colite Internat'l]:** It  
24 would even have to be worse than that.

25                  **MR. KEVIN O'HARA [Colite Technologies]:** It

1 would have to be way worse than that, because we're  
2 producing – you know, on an average, these wind –  
3 or, excuse me, these solar panels are using 350  
4 watts, and they're running – even in an eight-hour  
5 kind of shorter day in the winter, they're probably  
6 producing somewhere in the neighborhood of 700-800  
7 watt-hours a day.

8 **COMMISSIONER WHITFIELD:** So in three days,  
9 you're at full capacity – full capacity?

10 **MR. KEVIN O'HARA [Colite Technologies]:** Well,  
11 no, because you're not – they go in fully charged.  
12 You're using roughly 400 a night, so basically  
13 we're charged before the day is over.

14 **COMMISSIONER WHITFIELD:** Okay.

15 **MR. KEVIN O'HARA [Colite Technologies]:** We're  
16 fully charged, so we're –

17 **MR. MARTIN BROWN [Colite Internat'l]:** It's  
18 recharging.

19 **MR. KEVIN O'HARA [Colite Technologies]:** –  
20 filling it up –

21 **COMMISSIONER WHITFIELD:** If you were all the  
22 way down, you could fully charge your thing back –

23 **MR. KEVIN O'HARA [Colite Technologies]:** In  
24 one day.

25 **COMMISSIONER WHITFIELD:** – in one day. Okay.

1                   **MR. KEVIN O'HARA [Colite Technologies]:** On a  
2                   day like this. Not in the winter. During the  
3                   winter, it would take a few days, but that really  
4                   just doesn't happen.

5                   **MR. MARTIN BROWN [Colite Internat'l]:** But  
6                   they even – you know, they've monitored on pretty  
7                   cloudy days, rainy days, you know, and they're  
8                   still generating a certain amount of solar, so  
9                   you're never really at zero. Almost – very rarely  
10                  at zero.

11                  **COMMISSIONER WHITFIELD:** And then the ones  
12                  with the wind –

13                  **MR. MARTIN BROWN [Colite Internat'l]:** With  
14                  the wind, you've got that as your –

15                  **COMMISSIONER WHITFIELD:** – you've got that to  
16                  supplement.

17                  **MR. MARTIN BROWN [Colite Internat'l]:** I mean,  
18                  last week, we had, you know, 10-20 mile-an-hour  
19                  winds blowing, and the wind turbines were, you know  
20                  – but that's the issue, is even if you're going to  
21                  be charging up with solar on a nice sunny day and  
22                  it's a nice windy day, you're still eventually  
23                  going to charge up.

24                  **COMMISSIONER WHITFIELD:** How about the  
25                  batteries with the one with both wind and solar.

1 Are they the same capacity?

2 **MR. KEVIN O'HARA [Colite Technologies]:** Our  
3 standard battery's a 135-amp power and our  
4 statistics, based on a 100-watt light, 130 watt- –  
5 135 watt-hour, or, excuse me, amp-hour battery.  
6 That 350-watt solar panel is – you would have to  
7 have 11-12 days of really rainy, overcast, solid –

8 **MR. MARTIN BROWN [Colite Internat'l]:** Yeah.

9 **MR. KEVIN O'HARA [Colite Technologies]:**  
10 – before you would have any performance hit.

11 And then this is a 200-watt [indicating] light  
12 fixture on this. This is where we first tested a  
13 200-watt, and it's worked swimmingly.

14 But we put a 205-amp power battery on that, so  
15 when we have a little bit more output, we put a  
16 little bit more storage. And we've put as many as  
17 – you'll see when you come out here, we've got  
18 three 100-watt light fixtures on the same pole, so  
19 there we put a double panel, we've got the turbine,  
20 and we put two 135-amp power batteries in it, and  
21 we haven't had any issues.

22 **MR. MARTIN BROWN [Colite Internat'l]:** That's  
23 the key, like I mentioned, is that engineering  
24 support team. You've got to have the brainpower –

25 **COMMISSIONER WHITFIELD:** Sure.

1                   **MR. MARTIN BROWN [Colite Internat'l]:** – to  
2                   make sure we're calculating those things. So when  
3                   you quote the customer, you give the customer a  
4                   performance, you make sure the math backs it up.

5                   **MR. KEVIN O'HARA [Colite Technologies]:** Yeah.  
6                   We've got some pretty neat models. I mean, we're  
7                   using the same models to design these little  
8                   systems as they're using to design big solar/wind  
9                   turbine systems.

10                  **MR. MARTIN BROWN [Colite Internat'l]:** All  
11                  right. Let's go inside. It's getting warm. It's  
12                  South Carolina; it's getting hot.

13                  **MR. KEVIN O'HARA [Colite Technologies]:** It's  
14                  only April.

15                                 [Laughter]

16                                 [WHEREUPON, the presentation returned to  
17                                 and continued in the conference area of  
18                                 Colite Technologies as follows  
19                                 hereinafter]

20                  **MR. KEVIN O'HARA [Colite Technologies]:** I  
21                  want to show you guys something [indicating] that  
22                  gave us the impression that we were destined for  
23                  something really great here.

24                                 A couple of months after we installed this  
25                                 unit down in Charleston at the Clemson Energy

1 Center, SCE&G – somebody anonymously took this  
2 picture after a storm where we got a double rainbow  
3 terminating at our turbine top.

4 **CHAIRMAN RANDALL:** Cool.

5 **MR. KEVIN O'HARA [Colite Technologies]:** I saw  
6 that and thought, well, something special is going  
7 on here.

8 **MR. MARTIN BROWN [Colite Internat'l]:** So, any  
9 questions or –

10 **MR. NELSON:** So you're developing this as  
11 street lighting. Since you're in the sign  
12 business, too, are you going to be able to take  
13 that technology and turn it into signage?

14 **MR. MARTIN BROWN [Colite Internat'l]:** We are.  
15 We're definitely looking at that, and there are  
16 some applications out there already we're looking  
17 at, because you can really connect some nice-  
18 looking kind of way-finding signage. So, really,  
19 that steel structure is to add that extra wind  
20 load, and we have quite a few sign companies and  
21 other designers around the country that are  
22 interested in that concept. Certainly, in a street  
23 setting. So think about a city or a town could  
24 really get two-for-one. They could get a way-  
25 finding system and street lighting for – and

1 originally probably would buy two products, but now  
2 they're going to buy one. So it really is – it's  
3 definitely got lots and lots of opportunities,  
4 here. And that's the – I think, that custom nature  
5 of the design is where the real opportunities are.

6 **MR. KEVIN O'HARA [Colite Technologies]:** We're  
7 planning the technology now, and I wish I'd – I  
8 wish you'd asked that question before we went out  
9 there, because in the middle of our production  
10 area, we just assembled a box that's going to be  
11 going down to Liberty Steel in Georgetown. And  
12 they had a unique application where they wanted to  
13 put communication devices across their yard,  
14 because their trucks move around quite a bit, and  
15 the lighting is on time switches. They didn't want  
16 to completely redo their lighting system, so to put  
17 these communication devices on the poles they  
18 needed another source of power. And we designed a  
19 neat box and just a solar panel and controller that  
20 will supply power and control these communication  
21 devices and we'll just adapt it into their existing  
22 pole. So we're going to do that.

23 When customers have unique, challenging  
24 circumstances like those, we're going to give them  
25 a system to solve it.

1                   **MR. MARTIN BROWN [Colite Internat'l]:** Yep.  
2                   It's amazing how many people you talk to – I was at  
3                   a conference last week – how many people say, “I’ve  
4                   never heard about – I’ve never even heard of off-  
5                   grid lighting.” It’s amazing. So, you know, we’ve  
6                   got to educate the market, and that’s why every  
7                   meeting is important – architects, engineers, or  
8                   meetings like this. Just got to get the word out,  
9                   and just convince people that there is something  
10                  else out there that works. And it’s just got to be  
11                  adapted to the project.

12                  But to me, that’s the exciting part, is  
13                  interesting applications, towns, businesses,  
14                  communities. It’s really all over the board.

15                  **MR. NELSON:** Do you get any traffic wind, if  
16                  you’ve got these set up – because I’ve seen these –  
17                  I’m thinking of the Detroit Metro setup for the  
18                  trucks to go by, and the wind turbines spin.

19                  **MR. MARTIN BROWN [Colite Internat'l]:** These  
20                  would not work in that situation, no, because we’re  
21                  too high up.

22                  **MR. NELSON:** Too high?

23                  **MR. MARTIN BROWN [Colite Internat'l]:** Yeah.

24                  **MR. KEVIN O’HARA [Colite Technologies]:** But  
25                  the neat thing is the technology – and I mean, you

1 guys are very well aware of the declining cost of  
2 solar energy over the last 15-20 years, making it  
3 really at a term called "at parity" with the grid  
4 in some parts of the country. The Southeast is  
5 also one of those.

6 So the battery technology's coming down; the  
7 solar technology is coming down. We're doing  
8 everything we can to drive the cost down on our  
9 system, so the technology and the capability is  
10 just going to naturally drive these kinds of  
11 systems into more and more applications. It's not  
12 going to be – you know, it will be companies like  
13 us, for sure, but it's going to be drawn – because  
14 it just make sense and it's economic and more and  
15 more people are going to do it.

16 So, I was talking with someone early when we  
17 were getting started today, and there's just going  
18 to be more and more discreet distributed-oriented  
19 energy application as this technology continues to  
20 evolve and continues to get cheaper. So I see,  
21 frankly, that's going to become a big part of what  
22 you guys ultimately will be evaluating. Not  
23 tomorrow, maybe not next year, but it's certainly  
24 going to become more and more prevalent as  
25 traditional – what do you want to call it? –

1                   strongholds start to break away.

2                   You know, in some parts of the country,  
3                   utilities don't have as much stronghold on the  
4                   regions, driven by power costs. Power costs are  
5                   reasonable and easy here. But, again, the more  
6                   this technology comes down in price, the more  
7                   logical it will be to apply it in different  
8                   applications.

9                   **COMMISSIONER WHITFIELD:** You really are going  
10                  somewhere where nobody's going. There's a lot of  
11                  focus on distributed generation, the big debate  
12                  here in South Carolina. And, of course, Act 236  
13                  four years ago. And a lot of companies are getting  
14                  involved in distributed generation. But what  
15                  you're doing is – like I told the Chairman, it's  
16                  kind of like running the reverse in football –  
17                  everybody gone to the right, and you're over there  
18                  with nothing but green grass and stripes in front  
19                  of you on the left. And nobody's doing this that  
20                  I've seen. Talking about parking lots and common  
21                  areas and places like this. I haven't seen or  
22                  heard of anybody doing anything like this. And I  
23                  guess when you're in business and you're doing  
24                  that, it's good not always to go where the crowd is  
25                  going.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

**MR. MARTIN BROWN [Colite Internat'l]:**

Absolutely.

**MR. KEVIN O'HARA [Colite Technologies]:** Well, you've got to be careful to watch out for those big stiff blades of grass.

[Laughter]

**COMMISSIONER WHITFIELD:** I did want to ask you something along that line. You've got the pilot thing with the co-ops – and I can ask this, Mr. Nelson, because we don't regulate the co-ops. They're member-owned and not-for-profit, so we don't really – unless it's a territorial dispute, we don't really have anything to – we don't set their rates, or anything. But did you approach them? Did they approach you? How did you come to work with them? I know you included them in your slide. How did that come to be?

**MR. MARTIN BROWN [Colite Internat'l]:** Yeah, it just kind of came out of a mutual conversation that I had with Mike Couick about what we were trying to do, and just a general interest of ours to work with them, to get some – what do you say? – validity to what we're working on. And it's general interest for them to also learn about the product. So it was just kind of a mutual agreement

1 that this is interesting to test.

2 **COMMISSIONER WHITFIELD:** And with them not  
3 owning any generation, that would fit right in with  
4 what –

5 **MR. MARTIN BROWN [Colite Internat'l]:** And we  
6 need third-party, you know, validity of what we're  
7 doing. So that's why Clemson is important, that's  
8 why The Electric Co-Ops are important. It's good  
9 to have other people back up what we're saying, and  
10 back up the math that we're talking about.

11 **COMMISSIONER WHITFIELD:** So how broad are they  
12 piloting this for you? I know Jocelyn and the  
13 Chairman have seen –

14 **MR. MARTIN BROWN [Colite Internat'l]:** Well,  
15 so, Kevin's got a meeting Friday.

16 **MR. KEVIN O'HARA [Colite Technologies]:** Yeah,  
17 we're going to attend their – it's really just –  
18 it's still exploring, educating, understanding.  
19 And they have their spring engineering conference  
20 down in Charleston this weekend, and they've  
21 invited us to come and talk to the engineering  
22 council for the Cooperative Association on this  
23 technology, in a very similar way that we're  
24 talking to you guys, only it'll be much, much  
25 deeper technically, because we've gathered so much

1 data, and we have so much operating knowledge now –

2 **COMMISSIONER WHITFIELD:** Certainly.

3 **MR. KEVIN O'HARA [Colite Technologies]:** –  
4 they're really interested in how these things work.

5 **COMMISSIONER WHITFIELD:** Work.

6 **MR. KEVIN O'HARA [Colite Technologies]:** But I  
7 also want to add that we're – you know, we're in  
8 active discussions with a lot of regulated  
9 utilities, too, because even – as you guys know –  
10 they all have lighting programs.

11 **COMMISSIONER WHITFIELD:** Sure.

12 **MR. KEVIN O'HARA [Colite Technologies]:** And  
13 they also lease lighting to their customers. And,  
14 you know, we're trying to encourage them to  
15 consider this as an option when they are evaluating  
16 or offering lighting solutions to their customers.

17 And some, you know, like Southern, like Duke,  
18 they have lighting systems also in nonregulated  
19 subsidiaries. So, you know, there's different ways  
20 to take that to market. So we're definitely  
21 working with them, but, again, they're tough to  
22 change. It's all education; it's demonstration  
23 that the technology is reliable. And I don't – I  
24 don't believe, for a minute, that in a few years  
25 we're not going to be offering through utilities

1 for lighting.

2 **VICE CHAIRMAN WILLIAMS:** I've got a quick  
3 question for you, gentlemen. I don't know if you  
4 can answer this or not. But I have a small farm in  
5 Aiken County. I think we have about four meters –  
6 four or five meters, mostly for lights. Actually,  
7 one light pole, one to run a water pump, or if we  
8 wanted to plug in a tool or something to use. And  
9 I'm just wondering how or if the units – I guess  
10 the DS-300 – is it cost-prohibitive that if a  
11 farmer came to you and said, "Hey, this looks  
12 pretty neat. I wonder if I could implement this on  
13 my farm," especially if you're saying it comes  
14 prepackaged with the battery at the bottom.

15 **MR. KEVIN O'HARA [Colite Technologies]:** Yeah.

16 **VICE CHAIRMAN WILLIAMS:** Just put it up?

17 **MR. KEVIN O'HARA [Colite Technologies]:** At 12  
18 or 13 cents a kilowatt-hour, which is what we tend  
19 to pay residentially – what's the resident's rate?  
20 In that range, 12-14 cents, something like that?  
21 It is cost-prohibitive at the moment. Again, we're  
22 trying to drive those costs down. When you start  
23 looking at 20 cents a kilowatt-hour, or 30, 40, 50  
24 cents a kilowatt-hour, like you see in the  
25 Caribbean, even 20 cents a kilowatt-hour you see

1 some places, in California and other high-priced  
2 markets in the States, those are places where this  
3 becomes more compelling. Solar, on the other hand,  
4 is very compelling in South Carolina, even for  
5 small applications.

6 So those are the kind of dialogues we're  
7 trying to get more and more of those forums where  
8 we can interact with landowners like yourself, and  
9 others who have those kind of unique applications.  
10 And it may not be the right economic decision to  
11 take that meter out and put in an off-grid  
12 renewable solution; however, if you're getting  
13 ready to put one in and you want another power  
14 source for lighting, for plugging in a tool, or  
15 whatever, it becomes compelling.

16 And the comparison is not challenging. To pay  
17 for electricity, you know what the cost of this is;  
18 you can amortize that over time, and you can see  
19 specifically what you will pay on a per kilowatt-  
20 hour basis if you employ these kinds of systems.

21 So, yeah, the DS-300, even the DS-3000 in  
22 South Carolina – again, part of the challenge in  
23 South Carolina is we don't have that much wind.  
24 We've got a lot of sun. We don't have a lot of  
25 wind. Other parts of the country, that chart that

1 Marty showed where the bulk of the wind really runs  
2 up the gut of the continent, for that matter, all  
3 the way from Mexico to Canada, that's where it  
4 becomes more compelling, even with 14-15 cents a  
5 kilowatt-hour. Because you're producing so many  
6 more kilowatt-hours, you spread that cost over more  
7 production units, whereas here you don't get enough  
8 production units, and your cost for electricity is  
9 low. That's really what drove us to solar-only  
10 because, you know, we used to call this the turbine  
11 business. Now, you know, we're Colite  
12 Technologies.

13 Does that answer your questions?

14 **VICE CHAIRMAN WILLIAMS:** Yes.

15 **MR. MARTIN BROWN [Colite Internat'l]:** I think  
16 what's interesting is we have a few customers – the  
17 last comment I would say is there are opportunities,  
18 whether it's an industrial or, you know, somebody  
19 who owns a road, or whatever, maybe the power – cost  
20 to get power from Point X to Point Y is very  
21 expensive for some reason, trenching or whatever.  
22 Those are the applications that we get in there, and  
23 we are very competitive because just getting power  
24 there is difficult. So it's kind of –

25 **MR. KEVIN O'HARA [Colite Technologies]:**

1 That's another good point.

2 **MR. MARTIN BROWN [Colite Internat'l]:** So it  
3 just depends on the scenario. But, you know,  
4 Kevin's right; if a power pole is already there, it  
5 would be hard to compete with that.

6 **MR. KEVIN O'HARA [Colite Technologies]:** In  
7 South Carolina. In other places, yeah, we can make  
8 a case to do that. And if you want to stay grid-  
9 connected, you already have a grid connection, stay  
10 grid-connected. Depending on the market, you might  
11 be able to interact with the grid and arbitrage  
12 your own energy production. But it also depends on  
13 the region you're in, and the regulations.

14 **MR. MARTIN BROWN [Colite Internat'l]:** All  
15 right? Well, thank you for your time. I  
16 appreciate that.

17 **CHAIRMAN RANDALL:** Thank you. We appreciate  
18 you taking your time.

19 **MR. MARTIN BROWN [Colite Internat'l]:** We're  
20 right on time, 11:30.

21 **CHAIRMAN RANDALL:** This is great.

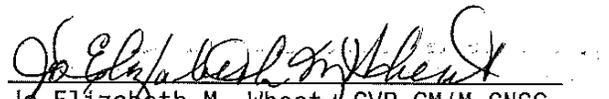
22 Ms. Wheat, we are adjourned.

23 [WHEREUPON, at 11:26 a.m., the  
24 proceedings in the above-entitled matter  
25 were adjourned.]

C E R T I F I C A T E

I, Jo Elizabeth M. Wheat, CVR-CM-GNSC, Notary Public in and for the State of South Carolina, do hereby certify that the foregoing is, to the best of my skill and ability, a true and correct transcript of the proceedings had regarding a requested allowable ex parte briefing in the above-captioned matter before the PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA;

IN WITNESS WHEREOF, I have hereunto set my hand and seal, on this the 1<sup>st</sup> day of May, 2019.

  
Jo Elizabeth M. Wheat, CVR-CM/M-GNSC  
Hearings Reporter, PSC/SC  
My Commission Expires: January 27, 2021.