Case Study Interview: Gulf Power—David Eggart

Prepared for the National Forum on the National Action Plan on Demand Response: Program Design and Implementation Working Group

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National Forum of the National Action Plan on Demand Response

Case Study Interview: Gulf Power–David Eggart was developed to fulfill part of the *Implementation Proposal for The National Action Plan on Demand Response*, a report to Congress jointly issued by the U.S. Department of Energy (DOE) and the Federal Energy Regulatory Commission (FERC) in June 2011. Part of that implementation proposal called for a "National Forum" on demand response to be conducted by DOE and FERC.

Given the rapid development of the demand response industry, DOE and FERC decided that a "virtual" project, convening state officials, industry representatives, members of a National Action Plan Coalition, and experts from research organizations to work together over a short, defined period to share ideas, examine barriers, and explore solutions for demand response to deliver its benefits, would be more effective than an in-person conference. Working groups were formed in the following four areas, with DOE funding to support their efforts, focusing on key demand response technical, programmatic, and policy issues:

1. Framework for evaluating the cost-effectiveness of demand response;
2. Measurement and verification for demand response resources;
3. Program design and implementation of demand response programs; and,
4. Assessment of analytical tools and methods for demand response.

Each working group has published either a final report or series of reports that summarizes its view of what remains to be done in their subject area. This document is one of those reports.

The Implementation Proposal, and the National Forum with its four working groups' reports, is part of a larger effort called the National Action Plan for Demand Response. The National Action Plan was issued by FERC in 2010 pursuant to section 529 of the Energy Independence and Security Act of 2007. The National Action Plan is an action plan for implementation, with roles for the private and public sectors, at the state, regional and local levels, and is designed to meet three objectives:

1. Identify requirements for technical assistance to States to allow them to maximize the amount of demand response resources that can be developed and deployed;
2. Design and identify requirements for implementation of a national communications program that includes broad-based customer education and support; and
3. Develop or identify analytical tools, information, model regulatory provisions, model contracts, and other support materials for use by customers, states, utilities, and demand response providers.

The content of this report does not imply an endorsement by the individuals or organizations that are participating in NAPDR Working Groups, or reflect the views, policies, or otherwise of the U.S. Federal government.

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Regarding the National Action Plan on Demand Response, visit:

http://www.ferc.gov/legal/staff-reports/06-17-10-demand-response.pdf

Regarding the Implementation Proposal for the National Action Plan for Demand Response, visit:

http://www.ferc.gov/industries/electric/indus-act/demand-response/dr-potential.asp

OR

http://energy.gov/oe/downloads/implementation-proposal-national-action-plan-demand-response-july-2011

Regarding the National Forum for the National Action Plan for Demand Response project, visit:

http://energy.gov/oe/national-forum-demand-response-what-remains-be-done-achieve-its-potential

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Acknowledgements

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Introduction

The Program Design and Implementation Working Group acknowledges the significant level of experience and knowledge about design of demand response programs and products that exists throughout the electric industry, but recognizes that this information is diffuse and has not been captured in a way to allow best practices and lessons learned to be identified. Thus this Working Group has focused on interviewing and gathering information from DR practitioners and presenting it in a way as to allow others in the industry to learn from what has already been experienced.

This report contains a transcript for one in a series of live interviews conducted by Dan Delurey (Association for Demand Response and Smart Grid) with a number of demand response practitioners from both the retail and wholesale side of the industry. This interview with David Eggart, Program Manager for the *Energy Select* program at Gulf Power, was conducted on July 11, 2012.

To date, transcripts for the following interviews are available:

Name	**Affiliation**
Col Smart	Con Edison
David Eggart	Gulf Power
Pete Langbein	PJM
Bob Donaldson	Progress Energy Carolinas
Bill Harmon	Reliant Energy
Paul Kasick	Southern California Edison

These "case study interviews" focus on identifying and capturing lessons learned from current demand response programs. The interviews were conducted via private webinar with the interviewee. In addition to this document, the interviews are available as webinar recordings, transcripts and downloadable PowerPoint presentations on the ADS website: http://www.demandresponsesmartgrid.org/CaseStudyInterviews.

Interview: David Eggart of Gulf Power

Dan Delurey: So, today, we have a case study interview with David Eggart who is the supervisor of a program called "Energy *Select*." David is with Gulf Power Company which is a subsidiary of Southern Company. Southern Company is an ADS member company. And as I said, the focus of the interview today is going to be a program called "Energy *Select*."

Now, before I turn it over to David to start talking about "Energy *Select*," I just want to inject my own interest in the discussion that's about to take place. When I first got involved in demand response about 10 years ago, one of the first things that I encountered that was actually called "demand response" was this program that Gulf Power was operating called "Energy *Select,*" and when I say "called demand response," it seemed to be the first one that was not called "load management" or simply referred to as "load control." We'll learn why I think that was. So if you get the picture here, this is considered by most in the demand response community to have been one of the first true demand response programs that was put out there.

So I'm interested to get an update today from David and to learn how the program has been going all these years. David, welcome today and I've already told people the name of your program, "Energy *Select*," but can you talk a little bit about what kind of a program it is.

David Eggart: Sure. First of all, Dan thanks for inviting me to participate in this. We're obviously very excited about the Energy *Select* program and happy to participate in this process.

The Energy *Select* program basically allows customers to respond to variable prices, pre-programming their HVAC systems, electric water heaters, and other major appliances to respond to these variable prices that vary by the time of the day or by season. So it's a program that really engages the customer to make more proactive decisions with regard to how much they want to pay, how much they want to consume, and how comfortable they want to be with their residential energy purchases—primarily their large appliances.

Dan Delurey: And, David, this is not an incentive-type program or a lump payment-type of program as many of the first generation of load management programs were, but this is based on price. It's a price responsive program, correct?

David Eggart: That is correct. That is a big difference, and when you say, "There's no incentive;" true, we don't pay a customer to participate in the program. The incentive that they see is the savings that they reach or achieve each month on their energy purchases. On an average, customers save about 15% annually on energy purchases on the program.

Dan Delurey: In terms of being price-responsive, I don't even know if the term "critical peak pricing" was originally used for this program—and of course that's a type of demand response pricing on a rate that everybody talks about today. Was it actually referred to as critical peak pricing in the beginning?

David Eggart: Yes. And if I'm not mistaken, I think right here is where that term originated. We started calling it "Critical Peak Pricing" right off the bat. One thing about the program that's very significant is that everybody gets enamored by the equipment and how do you make this work and how do you make it happen, and so on and so forth. But one of the very absolute essential parts of the program is the rate itself. The rate needs to be designed so that it's not so complicated people can't understand it. It has to be designed such that customers can see real savings from the program, and of course that is what incents them to participate. Then what we get in return is the demand savings that come from the program, and also—I was going to talk about this a little bit more later—but the fact that customers are responding to variable prices it actually makes our load shape better on non-critical peak days too.

Dan Delurey: Let's talk a little bit about how the program came about and what the goals were. But I think before we do that, can you just give us an example. I mean, can you tell us so we have this picture in our head as to what the price differential is. On a critical peak day, when that part of the program is triggered, what is the price?

David Eggart: Sure. The rate itself has four different price periods. Three of those are really the TOU component. We call those the "low," the "medium," and the "high" priced periods. Those are predetermined; a customer will know at any given time if they're operating in the "low," the "medium," or the "high." We have a winter and a summer price season. Obviously because of the weather, the cost of electricity is going to differ and the prices with any of those periods are basically setup so that they'll reflect what our cost of delivering that generation is. And if it costs us more to produce electricity, for example, during the high period, then the price during that high period is going to be more than the lower or medium period when it

doesn't cost us as much, then the price is going to be lower. Again, to correspond to what our cost of producing and delivering that electricity is, the low and the medium prices are lower than the standard residential price which is the flat rate that we all in the industry have come to understand and know and use for years. The low and medium prices are lower than that 87% of the hours of the year, so there's a substantial opportunity to stay.

Now, as far as the prices themselves, the low price is around $0.07/KwH. The medium price is about $0.08/KwH, and the high price is around $0.15/KwH. And our standard price is about $0.10 right now. And so, those are the three price periods that pretty much compose the TOU aspect of it. The critical peak price aspect is $0.58/KwH. And what that does is it pretty much incents customers to program their devices like their water heater or their pool pump to be off during the critical event and it would incent customers to say, "Well, if it's 78 degrees in the summer time during my high period, that's what I've got my thermostat set at. If I were to get a critical signal, then I want it to go to 85 degrees and that in essence turns the unit off."

And the big difference between what we do and what a lot of load control programs that most utilities are still doing, is that the customers determined how they want to respond. So, they obviously feel more in control of their purchases and understand this is an opportunity to save for them. So, that pricing signal in essence works as an off switch for them. And if you have a critical price event that's on a long duration, those units will start to come back on. But one of the things that we found is that if we can—the greatest benefit is from the first hour of any event—that we pretty much limit our critical pulse to about an hour's duration and we avoid that buyback aspect that customers might start to experience in longer calls. I think one thing that's important to remember too is there's a little bit of artwork involved in this. I guess you'd say that it's very important to get the demand results that we want, but it's also important to maintain a higher customer satisfaction with the program so that they'll continue to stay in the program.

Dan Delurey: Well, that I think is a perfect segue to talk about why the program was started and what your goals were. And you just talked about that a little bit but can you elaborate?

David Eggart: Sure. Obviously demand reduction was a huge aspect of it. We really didn't want to get into any type of direct load control program for several reasons. One of which was that if you think back to a point in time when we really started looking at the program, it was really late '80s, early '90s, and one of the things that for those of us who have been in the industry

that long can remember is that there was an awful lot of talk about open access. And so, most people believed that at some point in time residential customers were going to be able to make a choice of who their provider was going to be. And Southern Company was getting very, very serious about customer satisfaction and we viewed this as a way to enhance that customer satisfaction and was really going to work as a customer retention tool. So with that in mind, the program was designed around what can we do not only to satisfy our own goal but what can we do to keep customers with us and make them satisfied with the program.

Dan Delurey: So you were really focused on designing a program. I mean, you obviously wanted to have it work from a demand reduction standpoint but it sounds like you were really focused on developing something new that Southern could offer.

David Eggart: Absolutely. I don't want to state the obvious, but the program has to give us results or we can't offer it. If we don't get demand savings, if it's not cost-effective for us then we can't do it. But by the same token, I think a lot of us in this industry tend to spend too much time looking at what's good for us and not enough time on looking at what's good for our customers too. If we don't have customer participation, we don't have a program. So you have to build and design a program such that customers will want to stay with you and we've spent an awful lot of time over the years with that in mind—"How is this going to impact our customers?"

Dan Delurey: On this next slide that we're looking at here, as indicated, this program did require regulatory approvals. You had to show some impact results as you were just alluding to. But let's talk a little bit about the timeline here because as I noted in my remarks earlier on, this program has been out there for quite a while.

David Eggart: Yes, it has. And like I said a little bit earlier, the initial discussions internally really started about 1989 and then we really started getting serious with it a little bit later and going down to our public service commission with the FPSC—Florida Public Service Commission—about 1990. And we started talk to them about the idea of a price responsive program. It was pretty radical at the time because I think most people viewed the price of electricity as being inelastic and we really felt like it's very similar to any other commodities that you purchase. If you price it right, people will respond accordingly. We know that people do have control over their HVAC systems, they do have control over when they heat the water and have a storage tank for it, so you've got a great opportunity to heat water in a low price period and consume in the high price period. So we viewed it like that.

After a lot of discussion with the commission, we convinced them that it was worth a try. And so we developed a pilot program that we ran from September of 1991 through August of 1993. And the goals that we had when we set out on that program were, number one, to see what kind of demand reduction that we get. So, can we in fact reduce our generation? Will offering a variable price allow us to better use our existing capacities or, in other words, get that load shape a little bit flatter? And what does it do to customer satisfaction and customer value? Those were the things that we set out in the program and we were very, very pleased with the results of all of those. And so it was pretty much intuitive to us throughout the program as we were progressing that people were very happy with it and the preliminary results were good. We had to do our due diligence and get our research and our evaluation and build a good case, and then took it back to the Florida Public Service Commission for "Let's move this from a pilot to a program" and they agreed.

Dan Delurey: And was there a gap, David, at any point when you're talking about the early '90s? Has the program been in place since the early '90s or did you after the pilot sort of go back to the drawing board and then bring it back out again?

David Eggart: We kind of went back to the drawing board. The equipment that we used initially, it was good stuff but there were some things that customers told us about that they would do a little bit different. And I think it's important to note, Dan, that throughout this long evolution of products the basic program, the beliefs, the concepts, everything has stayed the same. The technology's changed around it, but what we're trying to accomplish and our goals in trying to accomplish those things have stayed pretty much the same. When we went out onto the market to look for an equipment producer/provider for this; it's new stuff. Nobody was really manufacturing it.

Dan Delurey: I want to talk about technology a little bit in a moment, but before we leave the question of getting the program started which, as you indicated, requires regulatory approval, I would think that your regulators would've been a bit surprised or maybe the eyebrows went up when you were proposing, at least for a certain number of hours, rates that were many multiples of what your average flat rate was.

Dan Delurey: Oh, absolutely. And like I said, you've got to transport yourself back in time a little bit, but to realize that most folks didn't look at the price of electricity as being elastic. And when we started talking about that, they were concerned about, "Are you really going to charge your customers more? Are they going to pay more for electricity in doing this?" And, of course, that's one of the reasons why you do a pilot just to find out

exactly what would happen. We believed that customers would save, and the results of the pilot bore that out. Customers save, like I said, on average about 15% off their annual purchases because they save not only on the rate but they save an amount that's almost equivalent to their rate savings due to the fact that they now have timers and they'll have a programmable thermostat so there's a certain amount of energy that they're not consuming. So, when you compare that to the control group just in energy usage, they were using about 7% to 8% less energy than the control group was.

Dan Delurey: So your regulators "got it." This program is a little bit of a—it's a tradeoff. One agrees for the high prices during the CPP hours and you get lower prices for the others.

David Eggart: That's right.

Dan Delurey: Well, in terms of developing the program that is, was this all done internally or did you go to people outside? You were, as we already established, I think making things up to a certain extent. So was that all just a "skunk works" inside of Gulf Power?

David Eggart: For the most part, yeah. It's primarily what we did here internal to Gulf Power and of course working with Southern Company. For example, we use Southern Company for the research to help us do some of the analysis and things like that. But the development of the program itself was internal.

Dan Delurey: Well let's return to technology and get maybe a little bit more specific. I think if I heard you correctly, you said that once again, because you were doing something new, you had to sort of look out there for technology that might be available and then obviously technology has evolved, at least I have to believe it's evolved a lot, since you first put devices into those homes. So can you talk a little bit about that?

David Eggart: Yes. And you're right, it has evolved a lot and I think one of the initial obstacles that we encountered was the fact that there were a lot of people doing direct load control but nobody was doing what we now call "Price Responsive Load Management" or "Two-Way Communication." There's a lot of theories, a lot of ideas, but it's a lot harder to do in actual practice than in theory because you have to send various communications through power line carrier for example within the home. And how do you package that? How do you make a secure network with your wide area network? How do you get reliable communications to these devices so that they're going to respond accordingly? Because, again, you're dealing with

customer satisfaction. If the equipment doesn't perform up to customer expectations, they would say, "Come get this stuff." It's got to work.

It was a very difficult process and it took us much longer than any of us anticipated, but that whole equipment development process took the better part of three to four years. But, fortunately, we got through that and began marketing the program to the general public in March of 2000. The results that we got were good initially but probably not what we initially anticipated because for one thing the price of electricity was low, so you had a lot of customers saying, "Well, I really don't have an issue with my bill." And if they don't have an issue, they don't feel the need to try to do something different. I mean, you've got that cutting edge out there that want to be the early adapters of things but there were some issues initially getting the thing going. But over the years we were able to I guess hone our marketing techniques a little bit and get greater participation and then there's neighbors telling the other neighbor what they got, that they like it. Of course word-of-mouth is one of the best types of advertising that you can have.

Dan Delurey: And I want to talk a little bit about how you promoted and sold the program but before we leave technology, can you give us maybe another image? Because I assume you might have completely different devices and communications methods, networking and so on in a home today. So what does it look like today and what did you learn along the way as you—was it simply new technology that was better came along or were there other factors that caused you to change?

David Eggart: Let me say, "all of the above."

And I think I need to say a little bit about what it looked like before for it to make sense now. But the initial device had a communications gateway that was attached to the meter and we always called this communications gateway the "Princess Leia" device because it looked like Princess Leia's hairdo on the meter outside. We had a paging network that we would call that gateway or page to that gateway for any type of critical event or anytime we needed to upgrade software or firmware within the home, and that was the first leg of the wide area network. For the second part of the wide area network, we utilized the customer's existing landline telephone to communicate back to us. The reason for that was everybody's got a phone, it's cheap, doesn't cost us anything, the technology was easy to do, much easier than a lot of the other technologies that were being discussed at the time. So that's what we chose for our wide area network. And within the home we had CeBus power line carrier communications going between the communications gateway and the thermostat and our load control relays if the water

heater is on. So, again, people were doing some of the power line communications anyway and we wanted to use CeBUS because it's an open standard type of protocol there and we wanted to make sure that as the technology evolved that we would have the opportunity to tie into the CeBUS protocol.

That worked great for a while, but one thing that we came to learn was that thing called the "landline phone" that everybody was going to have forever and ever didn't turn out to be that way. And I think that if you look at a lot of the numbers from a lot of the traditional networks, companies now will kind of tell you that they're losing an awful lot of their customers now. We've experienced that first hand from customers leaving the program, not because they were dissatisfied with it but because they viewed the cost of maintaining that landline as being part of this program. So when they would do their own economics for the program, they'll say, "If I got to pay that monthly phone bill just to have the program. then it's not worth it because I can get by with my cell phone." With us, it happened maybe just a little bit quicker than some areas of the country just simply because we had a couple of pretty significant hurricanes that obviously knocked out power and knocked out phone lines and various things for a pretty good while. In some cases customers were going weeks and months without their phone and began to realize, "You know, I can get by with my cell phone. I really don't need that landline."

When we first started seeing customers drop off, we didn't really understand why initially, but over time we were able to figure it out. And that was a considerable event for us. If you fast forward to about the fall of 2010, we were actually having to bring on two to three new customers just to maintain a net of one because we had a lot of people that were dropping the system because of their landline. To carry on, we decided we had to do something different.

Dan Delurey: Yeah, that's interesting. So not only was what I would call "demand response technology" changing in networking and communications, but technology inside the customer's home was changing as well.

David Eggart: Exactly.

Dan Delurey: Well let's talk about promotion and marketing and a different type of communications—how you recruited customers. I know this is residential customers but did you go into certain communities or did you look at certain sizes of homes? How did you target customers and then how did you reach out to them?

David Eggart: We initially looked at it like, "Okay, this is a program because of its design that two of the biggest benefits from it are control and savings." Those things appeal to a very wide range of customers. We've often been asked what the typical customer is, and it's always been pretty hard to hone in on because those two major things appeal to most everybody. So, if you're looking at control and savings and how it's delivered to most of your customers a broad approach does work, but some of the things that we tried early on were really targeting some areas where we had problem feeders for example or substations where we wanted to basically delay some of the capital improvements. But the problem that we encountered early on was that, especially when the program that was new, we weren't getting enough participation in such a small concentrated area to benefit us. So we changed our approach and went to more of a mass market shotgun approach to the market. And one of the things that we initially did was we had a VHS tape that had a little 10 to 12-minute promo explaining the program, and we had a brochure with that, and we sent it out to customers. We got some interesting comments like, "Why did you send me this video? You're taking up that landfill space." Just a lot of things like that. They're probably right. What we did was instead of going to that type of approach where we're actually mailing information out to customers, we tamed things down and just send a little trifold flyer out to customers that said, "If you would like more information, call us and we'll send you the information." And that worked much better.

But as times change, you can get information over the internet much better now and more and more people have access to internet. So we've shifted a lot of the resources there. In fact, all of our enrolments now are done online. Either the customers themselves signs up online, or if they call our call center, or one of our marketing reps, then they enroll the customer online.

Dan Delurey: How many customers are on the program and how has it grown over the years?

David Eggart: We've got almost 10,000 customers now. We're just a little short of that. And we were going really well up to the point where we started losing landlines, and that was around the 2007 timeframe when it started taking a nosedive there.

And then we had another technology hurdle to overcome with the development of the next generation of thermostat. I mean, we had a little bit of a period late last decade that slowed marketing down to a halt because we were basically running out of equipment. So we had to halt our production of marketing and we plateaued at around 8,000 customers in 2007. Then we kind of maintained that number throughout the last few

years, and then we reintroduced the program last August, the 15th of August as a matter of fact, as a broadband system.

We don't use the Princess Lea device anymore. We utilize the customer's broadband network and we have a new generation of thermostat and it uses Zigbee communication; it's the RF communication within the home. And customers really, really like this system. As a matter of fact, we've installed over 2,600 of those since August 15th of last year. So we're just short of 10,000 now, and we've got our installers scheduled out about five weeks now. So the demand for the program is good. We're very pleased with where we are and we're very pleased with where we're heading.

Dan Delurey: You mentioned a moment ago - and I think you were talking about marketing cost - but just to touch upon budget and costing, and also cost-effectiveness. Did things go pretty smoothly in terms of cost or were there really big things that you didn't expect to encounter?

David Eggart: Well, for us, the development cost was more than we anticipated. Fortunately, we had a good contract that helped us in that regard so we weren't getting hit too terribly bad, but the duration of the development was kind of long, number one. You've got lost opportunity there, but as far as developing budget, you said it a little bit earlier when you mentioned a lot of things were made up. The truth of the matter, every component, every process, everything that we did, we started from scratch on it because there was no template out there to go by. We made some estimations of what budgets should be. We did okay. We didn't do great with that but over time as we've been able to develop our budgets better based on some more historical information. We've been able to stay under budget for the last several years.

Dan Delurey: And how strict of a cost-effectiveness test was imposed on you?

David Eggart: Okay. What we use is the Rate Impact Measure, or RIM.

And I think most folks listening on this will understand RIM, but basically it just says, "If the benefits for the program exceeds the cost of the program, then it's cost-effective." You want to have a number in your RIM analysis that's greater than one. If it's greater than one, it's cost-effective. And that's how we evaluated the program since the very beginning.

Dan Delurey: Let's talk about changes. I think a lot of this you talked about already, but just to sort of move towards wrapping up here and reviewing and getting down to the lessons learned. It sounds like the goals and objectives have not changed that much that you still are trying to do the same thing in terms of customer value and demand reduction.

David Eggart: Yes, correct.

Dan Delurey: What else would you say that, you know, some of the key changes are?

David Eggart: One of the things that's most significant was that if you go back to the n the early years of the program, we had a high-price period in the summer time that was nine hours long. Customers would tell us, "I like the program but I'm going from 11 in the morning until 8 at night and that's a long period. It's a hard one to maintain the comforts that I want in the home and there's not much savings." And we knew from our research that customers didn't save as much in the summer as they did in the winter. And so, we went back to the Public Service Commission and requested a modification in the rate and changed the high-price period from 1:00 PM to 6:00 PM in the summer, Monday to Friday. I should have said this earlier but all weekends are at medium and low.

But the high-price period in summer being a five-hour period instead of a nine-hour period was a big plus. And for a long time we had a participation charge**.** It was $4.95 a month for customers to participate in the program to help pay for some of the cost of providing the equipment and what not. We did away with that about a year or two ago and that's been a big plus for us too.

Dan Delurey: That prompts a question about customer savings. I think earlier you mentioned an average savings or average reduction or something but did you have customers that didn't save or maybe even their bills rose on this program?

David Eggart: There's always going to be some. That's one of the great things about the program is it's voluntary and if the customers don't see the savings they want or believe they should get or expecting, they come off the program. But those are pretty rare.

The one thing that's pretty interesting is I think sometimes because of that conservationeffect, they've got other devices on the home to conserve energy, like the programmable thermostat and the timers on their major appliances. When you get that conservation reduction and the energy savings, some customers actually believe that they're saving more than they probably are. It's a program that's designed with customer choice in mind. Again, it's up to the customer to decide what that particular balance of comfort and savings needs to be and of course we have some customers that say, "You know what, tonight, I want to crank it down a little bit, stay a little bit, sleep a little bit cooler." I think that the big lesson learned from that is that they understand the difference in the price and how to use it to their benefit.

Dan Delurey: So in other words, when there's money involved, it becomes pretty clear to people. I mean, the idea of a price signal as you said earlier.

David Eggart: Yeah. We always called it having skin in the game. If you've got skin in the game you're going to pay a lot more attention to what you do.

I think that's another benefit of the program that really doesn't get talked about a whole lot but the fact that this program makes them much more conscious of what their energy costs are and how much energy they're using. So, it's been a big education process, not only for us internally but to our customers as well. And the satisfaction with the program is very high; it's well over 90%. Even customers that get off of the program for the most part have good things to say about it.

I know you didn't ask, but there's another thing that we found out is that, from some of our research, that customers that have participated in the program, that are participating in the program, their overall satisfaction with Gulf Power Company in general is higher because of offering a program like this.

Dan Delurey: Just by offering the program?

David Eggart: Just by offering the program, right.

Dan Delurey: And I think the other thing you said was, you know, we've talked about the price signal but there's also an information signal.

David Eggart: Yes.

Dan Delurey: And I know today, people are starting to talk about that being another flavor of Demand Response is being able to provide customers with feedback or information that leads them to change their behavior. And from the customer standpoint, you know, they feel more empowered because they've got that sort of information.

David Eggart: That's correct. Now, personally, I think that you've got to go one step beyond that and you've got to offer a variable price with it because it's much harder to see real savings if you don't have the mechanisms in place. Whether that's the right equipment or combination to make that saving, it's good to have the information.

We're sending out more information to our customers now, and as a matter of fact one of the things that we've done that's been a big boost to the program over the last couple of years is we now have online programming—web programming I guess we call it. The customers can log into our website and change thermostat settings, turn the water

heater on or off over the internet, and they can do that from any computer anywhere that's got internet. There's a lot of satisfaction with that and we're working toward giving them more information about their usage too. We haven't got where we want to be with that yet but we're headed in that direction so that customers can not only change their devices but see how energy they're using too.

This is an ever evolving situation and I think that there's a big lesson learned from the early research to where we are now is that—I don't know if there is any such thing as a finished product.

Dan Delurey: Well, that sets up what I will call my final question here. We've done a lot of looking back and talking about lessons learned but where do you see this program going? Where do you see it in "X" number of years?

David Eggart: I believe that price responsive load management is the future. I believe that by offering the types of systems with the right equipment, the right rate, people will respond. People will come to it, they'll like it.

I think one of the things that this does is it takes a little bit of the monopolistic feeling away from the utility and it gives customers more control over their purchases and they like that. That's one thing.

If there can be real savings, which gets back to effective rate design, then that's going to help them as well. We have a lot of people talk about, you know, wanting set-it-and-forget-it type of technology and that's true. That some people want to get in and tinker a little bit more than others, but by large, you don't have to do anything to respond and save money once you get the system set up like you like it.

I think that it's got a lot of appeal for a very wide range of customers and I think what we've seen here at Gulf Power is that it really appeals to customers from a low income, carrying it all the way into very high income. They see the opportunity to participate and say that it puts them more in control of what they're doing. I think this is the way the industry is going to eventually get. It's not an easy thing to do starting out, but fortunately some folks, you know, other folks, us and what not, they've put a lot of research into this so many years. And a lot of those early lessons learned will benefit the next users. I think that customers are going to come to the program. I think that more utilities can start offering this program and I think that it's the future.

Dan Delurey: David, on behalf of ADS and the many viewers of this case study interview, I just want to thank you for being with us today and good luck with your efforts as you, Gulf Power, and Southern move forward.