Rachel Johnson (00:07):

Welcome to co-op energy talk.

Rachel Johnson (00:08):

I'm Rachel Johnson, the member relations manager here at Cherryland electric cooperative. And I'm sitting here right now on March 1st, 2021. And the big news of note in energy in February was the massive power outages across the Southern part of the U S with Texas being hit quite hard. So as Texas saw, uh, historically low temperatures, um, left more than 30 people dead in a, a massive winter storm. It also, uh, ended up at, at its peak about 4 million people in Texas were without power. Originally. They were told they were a part of rolling blackouts that would last for 45 minutes or less, but many of them were without power for days. It had an impact on, uh, water systems and water pressure. It had impact on other energy infrastructure systems. And, uh, there's at this point at this moment in time, a lot of people who are interested in trying to figure out what went wrong.

Rachel Johnson (01:07):

And so, uh, even though we're not in Texas, we've been watching this very closely here in Michigan and trying to make sure that we learn whatever lessons there are to be learned from this experience. And so Tony and I sat down and had a, just a good discussion about what we know about the Texas grid and how it operates, what vulnerabilities we see in the way that they operate and how we can take those lessons and make sure that when it comes to providing power to Michigan's residents, we are always ready and that we always have enough to meet our members' needs. So listen in as Tony and I talk about, talk about what happened in Texas. So, I mean, I think all of us in energy and actually most people around the country kind of have energy on top of mind right now, as we've been watching the things unfold in Texas. It's, it's just always interesting. I think Paul many friends I have, who never think about what we do at all, but this has certainly kind of brought it to the forefront. So I appreciate you taking the time to sit down and talk through kind of what happened in Texas and w and what we can learn from it and what, you know, kind of what, what really went down. So let's, let's start by talking about just kind of some context of the weather issues that happen kind of an unprecedented weather event in Texas.

Tony Anderson (02:15):

Yeah, absolutely. That they broke some records that were a hundred years old, so it was weather that they hadn't anticipated. And, um, even if they've prepared for it, it was worse than anything that they prepared for. So they were just caught totally off guard by the weather and albeit it was predicted, but it was worse than the predictions, you know? So you can say, well, you can look at the weather forecast, they should have been ready. Yeah. But it was worse than the forecast.

Rachel Johnson (02:51):

Well, and it was, I mean, you think about, even with the forecast, I I'd read somewhere that they had, in some parts of the state, they were well below zero, like negative degrees. Well, that's not Texas, like that never happens. And I think it lasted maybe a little longer than what they expected. So it's one thing to get a, uh, you know, in an area like that, maybe like a really brief, but quick cold snap, but to have it to go on for days and days, that takes what might have otherwise been a shock event to your electric system. And it turns it into kind of like a longterm shock event. Um,

Tony Anderson (03:22):

Well, Austin T the temperature in Austin, Texas was below freezing for 144 consecutive hours, an all-time records for that community.

Rachel Johnson (03:32):

So to kind of set the scene, we're going to, I think one of the things we need to really talk about is the, the grid operator in Texas, but just to kind of make sure that everyone who's listening has the same context we have, um, at its peak about 4 million people in Texas lost power. And, uh, as, as, um, the acronym is ERCOT, it stands for electric reliability council of Texas, as they started seeing the amount of usage go up, we'll talk about some of the complexities they had with the availability of generating resources. But as that usage started to go up, they, they initially said early Monday morning, we're probably going to have some rolling blackouts in the 45 minute range type of thing. So we'll roll you off for 45 minutes, turn you back on, move to the next neighborhood. They'll go off for 45 minutes, turn you back on kind of a thing. And then obviously that just, uh, that situation changed really quickly. And you ended up with people who are out for quite some time. So let's start by talking about ERCOT, the electric reliability council of Texas. Can you, can you explain to those of us up here in Michigan, who ERCOT is and what they do?

Tony Anderson (04:35):

Yeah, they're essentially the manager of the grid, Texas is, uh, as an Island, uh, electric grid Island, if you will. And ERCOT manages all the generation on that Island. And, um, they are overseen by the Texas public utilities commission, as well as the legislature. So a lot of blame has been put on ERCOT as the manager of the grid, but the oversight and the policies are all, that's all on the state legislature and the public utilities commission of Texas. And in Michigan, we call it the Mid-Continent independent system operator and our grid, our Michigan grid is 15 States. So not an Island. So two different situations between Michigan and Texas.

Rachel Johnson (05:25):

And I think another thing that makes, uh, us, so in addition to us, having connectivity across various States, which gives us access to generating resources across various States, another big difference between our power grid here in Michigan and their power grid, there is they're fully deregulated power grid. Can you explain what that means?

Tony Anderson (05:43):

That means that a lot of the customers have choice and a lot of the customers, uh, take prices from the market. So whether when the market is down, they have low electricity. When the market goes up, they, they pay for the high market costs. And that's what you, some of the stories people have heard, um, high demand, low supply, the cost of power went up and in a deregulated market, somebody has to pay for that. And it's the people who are using electricity in a sad way. It was probably to your benefit to be off because you weren't racking up $600 bills a day for, for electricity.

Rachel Johnson (06:25):

Yeah. And I want to, I definitely want to talk about that because I think it's interesting kind of, as this was starting early on, and we're talking about kind of those that first day, day and a half, two days, most people's big concern was the fact that power was off, right? You have people it's freezing. People don't have electricity. It kind of morphs from there and people don't have access to water. And then obviously now a week later, we know that the big story of the day is, is certainly the cost. But, um, I, I found

something online that said something like 60% of Texas's electric customers, uh, have, are choosing, right? So they, they, they don't have an incumbent utility. They're choosing their power provider and to your point that allows them to price shop. But the funny thing about price shopping is sometimes it's to your advantage.

Rachel Johnson (07:08):

And then sometimes as, as we're learning, it's, it's not. And then the other thing, I think if I'm understanding it correctly with Texas grid, as you kind of hear, we have a lot of vertical utilities as well. So you, where you have the kind of people who own the generation also sell it to the, the end consumer, right? Whereas in Texas, the generation is owned by certain companies. The transmission is owned by certain companies. The sale to the customer might happen by a completely different company. So you have a lot of different players in that system, all trying to make it work together. And ERCOT is the one that kind of tries to make sure everything okay.

Tony Anderson (07:43):

Every, and they're all trying to make money in that system too, which has led to that. Well, one of the reasons for that deregulate market, there's more opportunity for profit when, when the market goes up, that we don't see it in Michigan because we're not deregulated to that level. Yep.

Rachel Johnson (08:01):

We kind of, we observe, we absorbed that and balance out all that risk. So you have, um, a very different kind of, uh, electric system than what we have here in Michigan, lots of different players, a lot of people choosing their power suppliers, you have ERCOT, which is not regionally connected. Um, another interesting thing about that is that because they don't sell because they don't operate across state lines, they're not federally regulated. So that's another difference between Texas and Michigan. So can you talk through kind of where Texans get their power from, in terms of power supply sources and how that played into what happened?

Tony Anderson (08:36):

Yeah, they, they actually, they get it from all the, all the sources. They have nuclear, they have coal, they have hydro, they have solar and they have wind and every source of power has had a problem, Texas, Texas peaks in the summertime. So they, they do a lot, uh, they need a lot of generation in the summertime. It's my phone, the problem that's okay. Where can we cut this?

Rachel Johnson (09:06):

Welcome to the new normal. We're not in for our listeners out there. We're not actually in studio together. We're, we're, we're zoom podcasting. So, yeah.

Tony Anderson (09:15):

Okay. I apologize for that. Um, where was I? All, all the fuels were in plank. Okay. Texas peaks in the summertime. So they hit, they had, uh, at least one or two nuclear plants down for maintenance to get ready for the summer peak. They had some coal plants down for maintenance to get ready for the summer peak and then their natural gas plants or work. Aren't hardened to the cold weather, natural gas lines, frozen natural gas could operate. Solar was obviously covered in snow anywhere from an inch to seven inches, depending on where you were at in Texas. And then the winds, uh, froze up a portion of the wind froze up. Now, a lot of the ports, uh, depending on what news station you listened to, they're

going to put the blame on their renewables. That's wrong. The other station is going to put the blame on the fossil fuels that's wrong.

Tony Anderson (10:07):

It was all of the above. They all had issues in the cold because they're not hardened to the cold. Like we are in Michigan in reality, or at least in my reality, nuclear saved the day because 73% of their nuclear capacity operated through the polar vortex. So very little was off. About half of the natural gas I believe was on about half of the coal was on, uh, hydro was at 18% capacity, wind. And solar is at zero and wind was at 2%. Well, you could say, well, you can put a lot of blame on wind and solar, but in reality, they don't get a lot of wind in February. So they couldn't rely a lot on wind and obviously was snowy could rely on solar. So, uh, there's just no real place to put the blame. We we've talked about it on this podcast over and over again for years that it's, there is a one silver bullet for power supply, and everybody's trying to put the blame into one source of power. And you just can't do that in during this, uh, Texas event, every source of power supply had an issue of some kind some more than others.

Rachel Johnson (11:20):

Yeah. It's I mean, the best kind of analogy I can think of is like, you know, just every once in way you have one of those days where you're like, literally everything that could go wrong has gone wrong. Like, why is it that when I leave my house a little bit late, I get stuck behind a front-loader going, you know, five miles an hour. And I'm on my way to the most important meeting of my life. And, you know, and I spill my coffee on my lap. Like just everything that could go wrong, went wrong all at once. So you have these historic low temperatures, which I was going to put some numbers to the, not to the temperatures, but to what it did to their, um, electric, their usage peaked in Texas at 69 gigawatts of need for electricity, which is higher than it's ever been. And to give you a little perspective on that number at that exact same time, they had lost over 50% of their generating capacity. So they had lost 45 gigawatts of generating capacity at the same time that they were, um, looking at about 69 gigawatts of electric demand. It's almost impossible to think of how to start filling those kinds of gaps and to your point, yeah, you need all of the sources to work. And every source that was designed as a backup for a different source failed.

Tony Anderson (12:28):

Yeah. And that demand was about 10 to 15% higher than what they had planned for and predicted. And about half, half their generation was down in total. So they were trying to serve an excess of peak with half the generation. And it, yeah, it was not obviously not good.

Rachel Johnson (12:52):

And to your point there, their nuclear facilities didn't fail. They did have some nuclear offline for route for planned maintenance. And the one thing with nuclear, we've said this before, it's not something you fire up and fire down fast. And so when you take it offline for maintenance, that is, that is a, that is an event, right. That you plan for. And then you plan for how you're going to bring it back on. But one thing I think is worth noting with their natural gas facilities. Cause I think it's an important thing that people don't realize is a different between natural gas and coal coal. You can store a certain amount of coal onsite, adequate plant. So let's say we ran into a supply chain issue with coal. We might still have two weeks of coal sitting in a pile at our coal plant, which could help keep that coal plant running to overcome a supply chain issue, natural gas.

Rachel Johnson (13:35):

Isn't like that. It's generally on demand supply. And in Texas, they don't have access to a lot of storage for natural gas because they've never needed to, they pull it right out of the ground. But as they started to have issues pumping natural gas out of the ground, they said they, they essentially had an actual gas supply chain issue. That is something that a lot of people don't kind of who aren't in the industry don't see or think about when we think about replacing coal with natural gas or replacing coal and nuclear with natural gas. Correct. Um, so all these things went wrong. You have this massive demand for electricity. You have a lot of people who don't have power at all. Some people still have power. Let's talk about the pricing thing. All of a sudden the story now is I was, I mean, and you can, you can throw a dart and find a hundred of these stories, right? People getting $7,000 electric bills, $10,000 electric bills, what happened?

Tony Anderson (14:27):

Well, it's what we've been talking about. That demand went up and there was no supply. So the price, the price went up by multiples of 10 and 20 and hundreds of percent. And so they, they ran up billions of dollars of bills and a lot of the, why did the generators are talking about how not passing that on to the end-use customer immediately, but how do they spread that over a period of years? So that's the bigger question in Texas, how do they pay for it? Uh, and how do they spread that out over a period of time, Brazos electric, power cooperative at G and T that serves 16 of the 70 some co-ops in Texas just today filed for bankruptcy because they have $1.6 billion in bills that they got to try to take care of. And that's an unforeseen unheard of event in our industry for up a power supply cooperative to file bankruptcy. So the costs are in the billions and they're staggering in Texas just now as, as we talk and speak is trying to figure out how to deal with that.

Rachel Johnson (15:41):

And, and there's, um, you know, a lot of chatter about, well, will there be a legislative intervention in that in order to provide some sort of a relief package, but you're still talking about just enormous numbers. And some of these initial stories we were hearing were stories of customers who are, are on that deregulated market, right? So they're buying from some choice supplier who their costs went up. They passed it right through. No, I think the big one that they just booted out of Texas because of all this gritty or something like that, it's called. Um, and then you have people who are served by your more traditional utilities, like electric cooperatives. It doesn't change the fact, even if the bill didn't come directly to the customer, yet every customer in Texas, somewhere behind the electricity that went into their home is a very large bill that they have to figure out how to manage whether it's legislatively or by spreading it out over time.

Tony Anderson (16:29):

Yeah. And to ask the rest of the country, to bail them out. Um, that, that tears me apart a little bit because they chose this system, you know, that they were caught was formed in 1970. Uh, Texas became an Island decades ago and have been operating this way and taking advantage of the system. And now in one of the times there's been a number of other times in their history where they haven't, it hasn't gone well, but this is the worst. And now they want everybody to bail them out. And I'm like, uh, I don't know how, how has that right? Because it is the market you chose this market. You've been proud of for the last 50 years. And now I didn't work for you. And now you want me to pay, you pay that through taxes or some tax break. I, I, I'm struggling with that today. As much as I don't want people to go bankrupt. I'm like, I don't know. That's a tough one. I got to figure out.

Rachel Johnson (17:25):

Yeah, I think it, you never want the, the lesson to be quite as stark as it is in this example, but it's kind of like the other side of the, both sides of the coin. So again, everybody loves to be in this deregulated market when someone's passing through really great savings, really cheap power supply, right? Abundance of wind in Texas, really low fuel costs for when well, zero fuel cost for wind. So they're passing that through people are paying $30 electric bills in February, and they're happy. That's great until it's not great. And when you, when you have that relationship with your power supplier, where they're just basically passing through their cost and taking a little profit off the top, that means they're not absorbing the risk for you. Whereas when you are served by an incumbent utility like Cherryland does for our members through Wolverine, we do take on the risk for our members, which would put us more likely to be in the position you described with, uh, uh, an entity like Abrazo saying, Hey, we're going to push this out over 10 years, 15 years as a surcharge on the bill, we'll absorb the risk and figure out how to make that work.

Rachel Johnson (18:24):

But a lot of customers, well, six, at least 60%, apparently in Texas, don't have that same protection of having an incumbent utility to absorb the risk for them.

Tony Anderson (18:34):

Then, then you look at the history and look at 2011 was one of the times where they had major problems with this situation too. In 2011, 193 generators were off and they had to shed 4,000 megawatts of load. And the 2011 outage lasted seven and a half hours. Fast forward to 2021, 356 generators were offline and they have to shed 20,000 megawatts, five times the load and the outage in 2021 lasted over 70 hours. So almost 10 times. So there is an argument to be made that this is 10 times as bad as it's ever been in Texas. And, and maybe that's why they need some relief. It's like a storm in Louisiana or other parts of the country. We all help those people. Maybe that's, maybe I'm making my argument to, to help them out because it's 10 times worse than they've ever seen.

Rachel Johnson (19:31):

So one of the things I've heard, and I don't know if there's any truth to this. So I'd be interested to hear your opinion on it. Is that in a, in a more deregulated market, electric suppliers don't have any incentive to build capacity to serve customers. And because they can just buy, you know, they're basically just buying and selling kilowatt hours on a market. And, and so you distance that you disincentivize people to actually own stuff, upgrade stuff, invest in stuff, kind of a thing. To what extent is that a part of this? I mean, I know we're trying not to point fingers and be very fair here, but

Tony Anderson (20:04):

It's a player in it because there is no incentive to have backup power and in our grid and in the miso grid and our neighbor neighboring grid to the ESP GM there's capacity markets, where essentially a utility says, I have X number of capacity pay me and I'll keep it in reserve. If you need it. You know, it might be a small gas plant or a that's typically what it is in Texas. There's no incentive for that. They've used the market as an incentive. They've said when a supply exceeds demand and the market goes up, that's the incentive for people to have generational available, to make money in times like the polar vortex? Well, when you don't have a lot of those times, over a period of years, there's no incentives to build those backup plants. They're building plants that they want in the market every day.

Tony Anderson (20:53):

So they can make money every day. They're not building a small gas plant to take advantage of one or two times during the year or one or two times, every five years. So there's really is a disincentive in the Texas markets to build backup power. Um, we don't have that here, that the argument can be made. We're paying a little more for electricity because of that. And, uh, I, we are, but that's the way we choose to do it. It's like insurance, you can go without insurance or you can travel the country with insurance. And we all make those choices with our cars and traveling as it is. And sometimes you have to catch that policy. And we have a policy in place. Texas didn't have a policy in place.

Rachel Johnson (21:39):

So we've kind of been moving around this, but I'm just going to ask this kind of straight to you. Will this happen in Michigan? Should we, should we be concerned about an event like this or a situation like this in Michigan?

Tony Anderson (21:52):

Not at this time. Um, I've, I've talked about it before. I've written about it before. As long as we keep building some natural gas or building new solar, new wind, uh, to, to keep up with the demand we're going to be okay. Michigan's problem is when we start shutting down coal plants, retiring gas plants, and retiring nuclear plants. As we continue to grow in this 15 state region, it's a math game. At some point, the, the usage, the, the demand for energy is going to exceed your capacity to generate. And that's, that's where our grid has to watch those numbers. Those numbers. During peak times, we've come close. We call them max gen events where we're getting close to max maximum generation. We've never had to shut anybody off in my 15 years here, but we've, we're getting closer. But I think as long as we keep building stuff, we're okay.

Tony Anderson (22:50):

But if we, if we want to celebrate, shutting off coal plants and not ask, what's replacing that coal plant, uh, we, we could have run a pro run into a problem, but it's, it's simple math, but people are watching every day load going up generation coming off and generation coming on, and those numbers have to match up. And I trust that the miso regulators are doing that for us. And I'm really confident. They are now checking those numbers after what happened in Texas. It's a wake up call for every grid to cause that's a logical question. They're all getting, can this happen here? And none of them want it to happen here. It will be interesting.

Rachel Johnson (23:33):

Something like five or six ERCOT board members have already resigned. Yeah. I'm pretty sure everyone on every re everyone is associated with anything having to do with regional grid operation or public commissions is, is stepping back and saying, well, what can we learn from this to make sure that we're not in the hot seat next? So I actually think that that was kind of how I was hoping we would end the podcast for you and I to talk through what do we think that people should learn from this? What are the lessons that we're going to take away from this one? I want to go back and forth. Why don't you throw one out?

Tony Anderson (24:05):

Um, not all your eggs in one basket. You know, there isn't one fuel supply that could have done this, got them through this, or cause this by itself, you have to have a diverse portfolio of power supply and you

have to spread it over a wide region too. When you spread it over 15 States, there's less chance of weather affecting that grid than there is when you do it over one state. Even if one state as big as Texas diversity, diversity is key.

Rachel Johnson (24:36):

Yup. Diversity. We've said that so many times on this podcast, and you've said it a lot in your manager's columns. Um, another thing, and we didn't have a lot of time to talk about that this in the podcast today. But one thing I thought watching this is there was such a communications failure. The, and I don't, I'm not there. So I can't say where that communications failure happened, but you had all these people out in their homes who, the only message they ever heard was we might have to turn you off for 45 minutes. And then they heard nothing. And I don't know that it was their utilities fault or if their utility wasn't getting information from the grid operators. But somewhere there was a massive communications failure that failed to help people prepare for what to expect. And I think that's a lesson. I think we all can learn to step back and say, we don't think this is going to happen in Michigan, but if it did, are we ready to make sure we can keep our members informed and at least help them know how to plan? Okay. Do you have another one?

Tony Anderson (25:27):

Yeah. The, the whole backup power thing. Somehow you have to incentivize people to have generation in backup, you know, and or the us natural gas or something else. You have to have a backup situation and people have to be incentivized to, to have it available.

Rachel Johnson (25:47):

Yep. And, and, and it's hard sometimes to get a lot of approval for what we'll call, not redundancy that's maybe, but, but you just, people say, well, we don't need it right this second. But then when we do need it, it's too late to start building it. And so that's, that's part of that, that knowing you have backup, the other thought I had thinking, thinking about lessons learned, and we actually have seen this in Michigan is just realizing that the more natural gas we bring online for electric generation, the increasing importance of having strong, natural gas transmission, um, infrastructure in the state, in the state of Michigan, we do have the ability to store natural gas. We have the right geological formations to store natural gas. I think those are discussions that need to be had. Um, because again, it was like here, you have a natural gas plant that could be operating that can't because we can't get the natural gas to the plant. Any other, any other takeaways for the, from the experts in there,

Tony Anderson (26:44):

Some people might say, well, people should put more solar panels on and get some batteries and ha, and have battery backup. And that that's one option for people. But I think that the easiest option, and I've heard of a couple of people I know in Texas talk about it. And a couple other podcasts I've listened to is the easiest thing for a homeowner in Texas to do is to go out and buy a gas fire generator for their home. And you're going to see a lot of that going on in Texas. I don't think that's a great long-term solution. It's going to lead to more pollution and more issues. But I think that's where the individual homeowner's going to go. He's going to run down to home Depot and get a generator. So he's ready next time. Yep.

Rachel Johnson (27:23):

You have to get them through a couple of days. Yeah. Well, I don't necessarily have any other takeaways because I think we've hit on the most important ones. We need to be making sure we're building things. We need to make sure we have a diverse power supply. We need to be prepared to communicate and manage people's expectations. We need to have our supply chain locked in. And certainly if individual homeowners are going to, to do anything to back themselves up, uh, something like a generator, but any, any other takeaways on your list?

Tony Anderson (27:50):

Well, I read a Forbes magazine article. That's just a point something to consider renewable subsidies in Texas from 2006 to 20, 29 will equal $36 billion. Meanwhile, the final cost of the South Texas project, a twin reactor nuclear plant came to 12.5 billion. So yeah, I don't mean to close this beating up on wind and solar, but it's something we need to consider when we look at the subsidies involved and we can make the argument that wind and solar were not expected to pick up much of this polar vortex and they surely were not. But then look at the price for that energy and ask yourself why isn't it, why are we putting that much, those billions of dollars into two sources of generation that aren't capable of picking us up in times of high demand, like we ran into. And that's, again, back to the diversity of power, we can't put too many or our eggs in a basket in our region or in any region. That's not there at times of high demand, whether it's the winter or the summer is balanced, we've got to maintain balance. And I just worry about getting out of balance with wind and solar and forgetting the traditional fuels that typically save the day. And it did save the day in Texas.

Rachel Johnson (29:12):

I agree. And another thing I worry about, and we see this, and even here, you know, when you have an outage, everyone's paying very close attention, but memories are very short. And that, that's an, that's another piece that I hope or that I think we need to attend to is while people are paying attention, let's have these conversations and get some momentum behind building, whatever it is, building some new generating assets, you know, shoring up our, our transmission infrastructure connect, connecting the Texas grid with other grids, right? Like those, those kinds of things. Let's, don't wait until the next time, because I, I did read an interesting article where ERCOT was, um, quoted as saying like, yeah, this seems like it was bad, but we really believe we were within minutes of catastrophic month, long blackouts. So in some ways they think it wasn't as bad as it could have been

Tony Anderson (30:00):

Actually four minutes and 37 seconds. They were, they were, uh, at 59.3 Hertz for four minutes and some change. They could only do that for nine minutes before they would have had weeks long outages. And they began shedding load in time. But they were within, they were under five minutes from a huge disaster. Yeah. So like every natural disaster, it could have been worse. And that's the case in Texas. It could have been worse.

Rachel Johnson (30:31):

And I think that the next steps for Texas, and then obviously, even though it wasn't, it wasn't, we weren't impacted here in Michigan, but for us, as we look, long-term, let's make sure that we do the things to make sure it's not worse. And, and, um, and continue to support shoring up our grid and preparing for weather events.

Tony Anderson (30:47):

Yeah. Yeah. We need to learn from this and move on. And I'm, I'm confident every grid manager in the country will learn something from it.

Rachel Johnson (30:54):

They're definitely paying attention. Well, Hey, thank you for joining me to talk about this. I know it's kinda, you know, those, those people up in the cold weather, Michigan talking about Texas, but I, I think it's important to remember that what happens in Texas, Ken, I mean, we're, we're all part of grids that look very similar. And so there are always lessons to learn from, from someone else's experience in order to make sure that we're doing everything we can to, to give our members good service here.

Tony Anderson (31:17):

And I've, I've gotten more questions about, could this happen here than I ever have on any other national situations? So yeah, this is very timely. Hope people enjoy [inaudible].