Marta: Today is June 1, 2015, and I am speaking today with Mike Gregerson from the Great Plains Institute (GPI). Thanks for meeting with me today. As I just mentioned, our goal with this project is to understand the CapX2020 group and examine how their projects fit into the greater regional transmission system and upgrades. I would like to start with getting to know how you became involved with the CapX2020 project and where your work links up with theirs.

Mike: I spent 30 years at Northern States Power and Xcel, and retired in 2004, which I think was about the time that Will Kaul and some others started the CapX process. They were seeing if they could get a group of utilities to work together on that.

A year and a half later I started doing some consulting work for GPI, and in 2007 the MGA (Midwestern Governors Association) had a big policy forum, and put some platforms together. One of the big things they wanted to do was accelerate the development of wind energy in the Midwest. So, they put that out there, but they had no idea how to do it.

So I started to work with the MGA with GPI on how we can start to advance regional transmission development and wind development. You need one to get the other. That was, I think, about the time CapX was--I’m not sure the exact dates--was kinda of formally put together, and the started doing their studies on what sort of projects they would look at, you know, how big. So they went through that whole process, put their partnership together, and then I think ended up with 4 or 5 projects. They have a couple smaller ones up north, they have the Fargo-Twin Cities, Twin Cities-Lacrosse, and then the Twin Cities to South Dakota project.

So they were beginning the process of going through planning, route selection, certificate of need, keeping the partnership together, and MISO (Midcontinent Independent System Operator) at the same time was starting to look at all the people who wanted to develop wind in the Midwest, and their system of approving projects was slanted much more towards coal plants, gas turbines, things that you put four or five hundred MW down in one place and the generator pays for the interconnection, and has the money to do studies. Well, there were a lot of wind developers who didn’t have any of that. So Claire Moeller was the one who initiated the process that said we need to come up with a different way to look at transmission planning because of all the wind that wants to be developed, and the inability of them [MISO] to handle those applications. It just-it was just getting out of control, and I think at one point he said there were 60,000-some MW of wind projects that people put applications in for, and it would have taken them 50 years to go through them.

During that same time, most of the existing transmission capacity got used up very quickly, so the smart wind developers figured out “where can I hook up where there’s the least amount of
new construction and how can I minimize my cost.” So the quick used up most of the existing transmission capacity.

So you had CapX going on, in which the first 2 projects just went live this year. That was 11 years ago that they started; when you think about how long they took to get through that process. And then MISO was trying to figure out how they could do something on their end with all the other projects. So I kinda put a partnership together with the MGA and MISO and some utilities and said that we would work it from the state end and the Governors Offices to try and get support. There was a process that began in 2008 or 2009, which was the UMTDI (Upper Midwest Transmission Development Initiative), which was 5 Governors that wrote a letter to MISO and said “you need to do something.” While that process was going on, CapX was trying to get their projects done, and MISO said “we need to do a larger study.” So they started the Regional Generator Outlet Study, which JT Smith worked on. So that basically was taking all of the states that had wind mandates or policies--RPS’s (Renewable Portfolio Standards), trying to identify energy zones in each state where you could easily put together a lot of wind, and good wind profiles. And then, what is the transmission that needs to be built to make that happen.

That [RGOutlet Study] took 3 years. They were doing the transmission studies, and the energy zones with the states. At the same time they were going through their cost allocation process, where they tried to get a process that everybody could agree to so they could send new tariffs to FERC to help pay for all these transmission lines that were built for [mumbles].

So in the midst of all that, CapX is moving along. They’ve got their projects to Brookings, South Dakota, they have their project to Fargo, they have the project down in La Crosse, and I think the ones up by Bemidji got built earlier. So in the middle of this process, it looked like MISO was gonna be able to come to an agreement on a tariff that said “if you qualify as one of our MVP’s (Multi-Value Projects), then 80% of the cost would be paid for by everybody, and only 20% by the applicant.” At that time, the Brookings project was gonna be 80% by the developer group, so they said “oh, we need to get this project included in the MVP portfolio! So they delayed that project. Fargo to Twin Cities was still a reliability project, and the Twin Cities to La Crosse.

So, through that whole process you had the CapX people working on their stuff--5 projects, 2.2 billion dollars. You have UMTDI that went along for a while, and then MISO kind of enlarged it, and created the regional generator outlet study, which was all the states in their group-13 states. Then those processes sort of merged together in about 2009 or 2010, and then CapX still had some projects that they were moving ahead on their own. MISO approved them, but they were basically the reliability projects for their partnership. The Brookings Project got put into the MVP Portfolio.
MISO ended up with 17 projects, $5.5 billion dollars. The Brookings to Twin Cities was one of them. So that went ahead and got approved by the board in the end of 2011. The tariff procedure and the proposal to FERC (Federal Energy Regulatory Committee) got approved. Those projects started up, and then CapX kept moving along, and basically got their routes approved, started construction, the Twin Cities to Fargo line just went live last month. I don’t know if Brookings is live yet.

Me: Not yet, but it’s very close.

Mike: Yeah, and then I think they have part of the Twin Cities to La Crosse line yet to build out.

Me: Correct. They are still working on that, closer to the Wisconsin part.

Mike: And then the last major piece of that puzzle for the Midwest was to get the La Crosse to Madison line.

Me: Right, Badger-Coulee.

Mike: Well, ask ATC and its Badger-Coulee, if you ask NSP Wisconsin it’s called La Crosse-Madison. But, that’s a shared project, and Xcel owns part of it, and ATC owns the other. That just got approved about 3 months ago.

So that really is the last piece of the big puzzle that allows a lot of wind in the western part of the footprint to move through the load centers of the Twin Cities and all the way down to Madison. It’s a really big deal.

Marta: Do you think the lines are enough? It’s my understanding that the bottleneck is around the Wisconsin-Illinois area that’s preventing wind from getting further east. I also understand that there is room for increased capacity with the lines that are being built, so there is room for growth built into these lines.

Mike: Yeah, the Twin Cities-Fargo has one circuit, and there’s room for another circuit.

Marta: Right. So, maybe you could talk a little bit about how the CapX projects fit into GPI’s goals of getting renewables onto the system. Where it's succeeded in that, and where there are some holes that you see. That’s kind of a long question, so we can unpack that.

Mike: Overall, GPI’s goal is to advance clean energy in the Midwest. Whether that is solar, or wind, or biofuels, energy efficiency is a part of that. A large piece of that in the Upper Midwest, because of our footprint and the way the load centers are laid out, is that we need a lot of
transmission to make that work. When you have wind, which is generally from
Manitoba...Buffalo Ridge runs all the way down to West Texas, with Kansas and North and
South Dakota, and parts of Iowa and Minnesota having good wind potential--this wind is not
where the people are. So there had to be a lot of work done to get people to understand that, and
then to be supportive of building, which some people view as beautiful, and some people view as
ugly, but they’re large, very high, very large transmission lines that, for some people, including
some environmental groups, say “My lights are on, things are okay, why do you want to do
this?” So there’s that immediate suspicion that the utilities and MISO are doing this just to make
money, and we really don’t need it, and if we do, more distributed generation will make
everything okay.

The problem with that is the level of wind development that we’re capable of doing in the Upper
Midwest is enormous. We have 13,000 MW already built and operating in the MW, and there’s
gonna be another 13,000 MW, which will then meet most of the state mandates. We have the
potential to build between 50,000 and 100,000 MW. All the DOE studies that they’ve done
basically say that if you can get the transmission built, and have a large enough load footprint,
we can have 5-6 times the amount of wind we have now.

The other really positive part of that is that in the last 10 years, the technology has advanced so
fast. Wind turbines are taller, their rotors are bigger, the technology is better, they operate much
better at low wind speeds and high wind speeds. They can be managed directly by the system
operation center, so that they don’t have to be curtailed or turned off as much. Having the ability
to look at localized wind patterns in real time, and have computer models that help system
operators operate and not turn the wind off as much when they get scared that the transmission
lines gonna get over capacity.

That does two things for you: it makes the wind that you have more valuable because you’re
operating it more each day, and each week. And you’re also making it so it integrates better with
the rest of the system. One of the things that system operators have to do is balance when the
wind power goes up and down. They have to have gas turbines or coal plants operate, so the less
you can do that, overall the system operates more efficiently and you’re not wasting energy as
much.

So part of our job at GPI is to work with state regulatory people, governor’s staff, and
environmental groups to understand the potential that is there. We basically are hopefully at the
beginning of what we are capable of doing in the Upper Midwest. And the second part is just the
amount of work, and effort, and time. I mean, if you sit down with Will Kaul--it’s been 11 years,
and the 1st line has been energizes. It’s a very painstaking, careful process. And if you go
through all of the public meetings, and engagement of regulators, and utility people that you
need to do to get it done right, it’s a lot of work, and it takes a lot of time. It’s a lot of meetings,
and in some cases, some parts you have to do them over, because maybe the idea you had for a route, overall people didn’t like it. There were a couple parts of the route on the La Crosse-Madison project that went through some Amish territory, and they ended up moving the line because the community didn’t want the transmission there, and the state agreed with that.

So the process of getting that done, number one is really hard, and it takes a real collaboration by everybody. And the other part is trying to keep people understanding of how important it is. Because it’s just hard when people say “we’ve only had one outage late year, tell me what the problem is.” You know, I have friends in other industries, and they’ll say “why do we need transmission?” There’s no general understanding of the way the system operates as a whole. Or there’s the hope that some have, “Well if I just put solar PV on my roof, maybe you guys will just go away and you won’t bother me anymore about having to build things.” And it’s a process that I think is ongoing. You don’t meet with a state legislator, or a commissioner, or an energy policy person once and everything’s fine. You need to keep coming back because the regional grid that we have, and the sources of energy that we’re starting to put in, you know, we’re gonna do community and utility solar gardens now? I already have people that say “I don’t want that next to my property.” They were hoping that they could go out and that everyone would love them because its solar pv, and wind has the same issue. People want the electricity, and people want it clean, but “aww gee, I really don’t want to you build that wind farm next to me.” So it takes an ongoing effort that I think people yourself, and what Elizabeth Wilson is doing, and what the utilities are trying to do, and others, you just have to keep at it.

I think gaps in the process--I think overall that the Upper Midwest has done pretty fantastic. If you look at what’s happened as a result of CapX and the MISO process, we have almost $8 billion dollars of projects that are gonna get built. If you think about that, and how--that’s a very large number that somebody has to pay for, and the fact that they got that done and approved, and we so far has made it through every state regulatory process, that’s pretty incredible. Those projects by themselves are not only going to improve the reliability in the region, but I think the number is 5-6,000 of additional wind is going to be able to be built, without having to do much else on infrastructure build-up.

What we’ve been promoting with the environmental community, and with MISO and the utilities is to take it step-by-step, but keep doing the studies to look at the next level. To say, okay, we’ve been through this process, we’ve gotten these approvals, we’ve spent a lot of money, we’re going to spend more--what can we do at the next step--because we know that getting agreement on these things takes 3, 4, 5 years. You don’t do the study and go to the MISO board and say “oh! Let’s build another $3 billion in projects and another 5,000 MW of wind and everything will be fine.” It takes time to get people to buy-in, and to do the technical work, and the legislative work, and the communication work.
Marta: What are your thoughts on how the CapX partnership approached this challenge? Did it really matter that it was a group of 11 utilities that came together to do this? Could Xcel have achieved the same thing on their own?

Mike: I don’t think so. I think at the time that they started this process, back in 2004, there really wasn’t much agreement on what to do. The other part of it was, I think, they needed to put together a group that was willing to work together so that when they went to the state, and the counties, and the local people, that there was an understanding that this was a process that involved a lot of people, and not just Xcel, or not just MN Power.

I think that was a big piece of them being successful, because I think that if they would have tried it individually or on their own, they could have possibly not gotten it done, or had some of the projects turned down. I think they also, by working together, presented a much stronger picture to MISO and the states that they were in that this was a good idea, and even though it was a lot of money, there was a believability to the work that they did.

You know, MISO ended up doing the same thing. The package of MVP projects is a portfolio, and they’ve tried over the last 3 years to make sure that the portfolio stayed together. The value of doing this was really 17 projects, 5.2 billion dollars, and you can pick one off and say “we shouldn’t do that one,” but collectively you can say “if you run the modeling studies, and look at all the benefits. If we do these projects together, the overall benefit is much greater than if you look at each one.” And that’s the process that they’ve tried to use to keep people thinking positively, which isn’t easy sometimes.

Marta: That leads me to want to shift over the policy realm of things. Let’s talk about the work that you’ve been doing with the MGA, and the letter that the 5 Governors wrote to MISO. It’s kind of like the chicken and the egg, right? We’ve got CapX that’s doing their thing, and at the same time things are changing on the policy side of things, and then CapX shifts to react. So, this was something that was brewing, it wasn’t just CapX that pushed this forward.

Mike: A lot of what pushed it forward was that you have a lot of states that were starting to put renewable energy standards together, and requiring the utilities to build a certain percentage. So you had in North Dakota a 10% goal. Iowa is kinda of different because I think their standard was 175 MW, but they provided tax advantages and other things to the utility in the state that made it so they put in more wind than anybody else in the Upper Midwest. Then MN had the 30%/35% for Xcel. Wisconsin I think had 10%.

So, it really was the initiative of the states individually, and then MISO trying to put the collection of that effort together to say: “Okay, we’ve got all these states doing these renewable energy standards and goal, and when you add them all up it’s 24,000 MW. What the hell are we
gonna do?” So they were trying to get the states to work together, similar to how CapX got 11 utilities to work together to say “if we’re going to spend money to try and make this happen, what’s the most cost effective way to do it.” So they really tried to emphasize that they knew they had a standard in Minnesota, and one in Iowa, but if we do the study all together, we can hopefully pick those transmission projects that will provide the most benefit to the region, and in the end, hopefully minimize the amount of investment. Because, I mean, you take one project, and you spend $700 million dollars, that’s scary stuff. And it’s a transmission line that will be there 50 years from now. So you want to try and get it right.

Part of what they did is called the “No Regrets Group”. They did all the studies, and they looked at different scenarios, and then when they got done running all those scenarios, they asked themselves what were the projects that stand out in each scenario as the most cost beneficial to do. So that’s how they go the 17 in the MVP portfolio. Then they said “We think no matter what happens in the next 20-30 years, this group of projects makes the most sense for us to do.” So they went to the board, and the MGA went there with them and supported it. We were saying that when we look at it from a state perspective, we want to support renewable energy, we want to support economic development, we want to support jobs, and all the Governors can agree on that. No matter what your party politics, we didn’t have much trouble...whether it was a democrat or republican--saying if we can prove this as a beneficial effect on jobs and economic development, and can be done in a way to keep electricity prices down—that was another big piece of this. We wanted to make sure the Midwest continued to have some advantage from electricity prices for economic development. Since MISO was there to approve that, then they supported the projects. So, CapX got the support they needed, and MISO MVP Portfolio got the support it needed.

And like I said before, you had to keep going back to talk to them. You get new policy staff, or a new Governor, or a new Commissioner, and you’ve got to go talk to them about it, and make sure they understand the benefits of this. It never ends.

Marta: Yes, there are lots of moving parts. One of the things that came out of the MGA Transmission Summit in 2014 was the identification--aside from having more guidance from MISO--another thing that was mentioned from both the state and federal perspective is the need to streamline or take some redundancy out of the permitting process. It takes so long to get these projects up and running. Can you speak to that a little bit, and about your work with environmental agencies and regulators?

Mike: You have a couple of areas where things get a little dicey. One is, I think every state for the most part has retained the right to certify the need for the project. It would be nice if everybody would say that if MISO does the studies, and the board approves it, then we all know
it’s needed. But, at the end of the day, you still have Minnesota, Wisconsin….they want the right to make sure that project is needed, because their rate-payers are going to help pay for it.

You get a little scared or queasy saying oh, we did the studies, and the projects were approved by MISO board, and then 3 years later we’ve coming to a state agency that has to approve the need. So they have the people come in, and the MISO folks and the utility people and others, and they talk about the need. And it could be 3-5 years after the original studies are done.

There is, in fact the Wisconsin project had it where because load growth was down, some of the interveners said “oh, we don’t need these projects anymore because loads down.” Well, the project is going to last 50 years. It’s something that you can’t take demand growth, for like 1 or 2 years, and say that we know what’s going to happen in 2050. You just don’t. So, that’s a necessary part of the process that gets people a little nervous sometimes, because they say “geez, we’ve been working on this project for 4-5 years, and we’re finally coming to a state for the approval, and they’re gonna decide if it’s still needed. Okay.” So that’s one, and each state does it on their own. If you have a project that is in more than 1 state, you don’t get one certificate of need, you need two (or more).

The routing the permitting is an area that gets real personal real fast, because at the end of the day you’re approving a project that goes over somebody’s land. You’re approving a project that somebody gets to look at for the rest of their lives. So, it’s nice to talk about “gee, we should have federal backstop authority so that the department of energy or somebody can come in and just say that this project is necessary and critical to our nation's infrastructure, and therefore we approve it.” They’ve tried to get that authority passed a couple times, and it’s never worked. The states are saying that at the end of the day, we have a right to approve not only the need, but the route.

One of the places where it gets dicey is when there are river crossings because then you get the feds involved. USFWS (US Fish and Wildlife Service) in our part of the world manages all of the permitting for the Mississippi Flyway and that area, and that can get really nasty. When they worked on the Twin Cities-La Crosse line, they had some routes that went all the way down and then crossed by La Crosse, and USFWS said “Nope.” And that made them go up to Alma where the Dairyland Power Plant is, and cross there while upgrading an older, smaller line. Then all of the sudden the state of Wisconsin said, “oh, now we’ve got to route all the way down the Wisconsin side from Alma to La Crosse,” and that created problems for the state of Wisconsin, but USFWS said, “we don’t care.”

They’re having the same issue on the Cardinal Bluffs project in Iowa. It’s a river crossing, and USFWS said no. It’s hard. I’ve thought about different ways to try to make it work better, and we looked for a while at an idea that a multi-state group might act together to certify a project.
So if it goes between Minnesota and Wisconsin, we would have one siting agency that would approve the whole thing. Well, people are willing to talk together, but most states are not willing to give up their legal authority to some other group. They just aren’t.

So, Minnesota has a process that they certify the need, and then they certify the route. Wisconsin does it all together. That’s pretty scary, but that’s the way they do it. That’s why you end up sometimes with the same project gets the need certification that is 2 years apart. It would be nice if all the states had the same process, but making that happen is tough.

The biggest concern that I’ve gotten back from people is when some of the federal agencies get involved. It’s a much bigger issue out west than it is here, because you have national forests, and park lands, and everything else, and it can get pretty nasty. But here it’s been more river crossings and places like that, and trying to upgrade an existing line, and USFWS says no, it's in the flyway and we’d rather you not do it.

Through the MGA we were involved in the inter-agency task force. They were looking at trying to fast-track the federal approval process for transmission projects and get more work done up front. They called it the Rapid Response Taskforce. Well, we went to the meetings, and they took the suggestions, and put out a report, but really not much has happened. The best example of somebody trying to do that has been MN Power, with the Great Northern Project, because it’s an international crossing. They actually have gotten a lot of accolades from DOE (Department of Energy) on the way they’ve handled that process, and done a lot of the early action meetings, and trying to work before the permits were even filed to speed that process up. It actually went very well. It wasn’t an oil pipeline.

**Marta:** It’s interesting though, that it was easier to get an international project approved and in the works than it was to cross states.

**Mike:** Yeah, MN Power took some of the recommendations out of the Rapid Response Taskforce, and then sat down with DOE, and I’m not sure if there were any other federal agencies, but they’ve tried to work out an early process to get information shared early, and have meetings. I think it overall went very well.

I think people at the end for the Twin Cities-La Crosse Project say things worked out. They had some confrontations with USFWS, the Cardinal Bluffs project--I think ITC is going to submit some route alternatives sometimes this year, but nobody quite knows how that’s gonna work, so…
Marta: Do you think what MN Power has done--do you think that's a good approach that other people should be doing in the future--this meeting ahead of time. Why do you think that hasn’t happened already?

Mike: It takes a long time, and when you’re at the stage where you’ve got a lot of options, sometimes people are concerned that if you share all that information, everybody will just get confused. At the end of the day, they say “well, maybe it’ll go easier if we get down to the final route selection, and file all the permit applications then.”

We worked with some environmental groups on the La Crosse-Madison project who got upset because the companies presented more than one route that had great variability. But you know, they were required by law to do it, but there were people that thought that they were just trying to confuse folks by giving all these options, when they really already knew which route they wanted. But that’s not what they intended-they had to do it, so they were trying to present options. In the Upper Midwest, the Fargo-Twin Cities line is a good example--a lot of agencies had wanted them to follow the highways as much as possible, which means a lot more people see the transmission line, but they think the impact is much less for agricultural industries.

Marta: Let’s talk a little bit about some of the FERC orders--FERC 1000.

Mike: You want me to put you to sleep.

Marta: No! It’s riveting stuff! Well, what I’m curious about this divide between the state and federal perspectives. Opinion question: what do you think works? Do we need federal standards?

Mike: The way that the grid is organized right now in the US I don’t think it would work. You have the major RTO’s (Regional Transmission Organizations) right now trying to get themselves to a point where they are well organized and spending money in the right places. So you’ve got PJM and MISO and SPP (Southwest Power Pool) and Cal-ISO, and the areas that don’t have an RTO, who aren’t required to because it's voluntary. What FERC has been trying to do is to say, “as much as possible, we want you to follow these guidelines. We want you to do transmission planning in an open way that makes sure you meet all the state policy mandates that are there. And then we want you to do cost allocation studies, and share that with everybody, and do the same thing--make sure you meet the mandates.”

A piece right now that’s getting a lot of attention is the seams integration. They think the system will work better and more efficiently if the ties between the different RTO’s--that there’s planning done that that picks transmission projects that could make the system work better. The problem with that is that somebody has to pay for it, so you have to cost-share. And you’ve got RTO’s that aren’t used to sharing very much. And if you move energy from a lower-cost RTO to
one that’s more expensive, somebody loses money, and they don’t like that. That’s something that is ongoing and has been going on for a year and a half. I think they’re actually making progress, but it’s really slow.

Marta: Do you think that there is something that FERC can do to bind RTO together, make them play nice together?

Mike: Well, FERC is trying to use their regulatory authority without issuing too many mandates or orders. They have to walk that fine line of saying ‘We have authority,’ but at the end of the day you have to get people to work together because you have to share a lot of information, and look at common cost allocation techniques. Like how do you do energy transfers between two RTO’s that aren’t the same? MISO is a vertically integrated energy market, PJM is a wholesale capacity market-which is totally different from MISO, and you just can’t wave a magic wand and say “We’re gonna start moving energy in between, and we’re gonna do 5 or 6 transmission projects and everything will work a lot better.” Well. Somebody’s gonna make money, and somebody’s gonna lose money, so it’s hard. FERC is trying to take it step-by-step and see if they can get it done without creating lawsuits and everything else.

The other problem they have is that there are regions of the country that don’t have an RTO. Most of the West and the Southeast. It’s hard to get things done. You don’t have cost-sharing agreements, you don’t have common transmission planning, you don’t have an overall energy market that you can work off of every day. It’s hard.

Marta: What will it take to get the regions that don’t have an RTO to come together?

Mike: You have to pass a law to make it mandatory. Congress has to decide that, and there’s parts of the west that don’t want more federal oversight, that’s just the way it is.

Marta: Is there anything else about the MVP line that you think is important that I should know?

Mike: The biggest piece that I think is important that needs to constantly be highlighted is that they did it as a portfolio, and if they would have tried to do it just one-by-one, it probably wouldn’t have gotten done, or they would have only done half of it. Trying to get the states and the utilities to agree to act as a region and plan as a region, I think at the end of the day, saves you a lot of money, and you do things a lot better, but it’s very painful because [people think] ‘I’m paying for a project that’s in another state, and I’m not sure that’s a good idea.” We’re trying to get people to have enough faith in the process and the results so that customers in MN are willing to help pay for a line in Indiana.
Because more and more, the transmission system is acting regionally, and the benefit that you get from operating that together are enormous. But, people forget that in the midst of saying “oh, you just approved a project 2 states over, and you want me to help pay for it? I’m not sure that's a good idea.” So, trying to continue to get utilities and state commissions to plan and work together is ultimately a good thing because it does save a lot of money, it lessens outages, it increases reliability. But at the same time, it’s very difficult. It’s like the example of “we should build all the wind in ND and have everybody else pay for it.” Well, the people in MN and WI and IA, they want their own money. So, you try and share it, and hopefully you can build transmission and build wind projects that are still pretty good operations that have high capacity factors, but they are shared so everybody gets a piece.

**Marta:** So what’s unique about the CapX MVP line compared to some of the other ones that were approved that weren’t a partnership?

**Mike:** I don’t know if it was unique. It was mainly to bring wind out of South and North Dakota, and it did a very good job of being able to do that. 2-3,000 MW of wind capacity that come on that one line--so that’s big.

**Marta:** That’s about all I have for you, I just have a few more big picture questions. What do you see as some of the most important emerging issues?

**Mike:** The biggest emerging issue is what’s going to be the impact of the EPA rules. How much is the generation mix going to change? Where are you going to have power plants shut down? What do you do about it? Do you just build a gas turbine every place you had a coal plant? Or do you build more transmission? Or do you build more wind and utility-scale solar? You need enough time to make those decisions in a public environment where everybody can share in the process, then hopefully make the most cost-effective decision. It’s gonna be a big deal. And there’s gonna be federal agencies looking over everybody’s shoulder while they’re trying to make these decisions, and you’re gonna have impacts on individual states and individual utilities, but the solution might be a broader solution that involves other states….so, once again, you have to get people to think more regionally. When you’re making a decision on shutting down plants and laying people off, that’s not very easy. That’s probably the biggest. The other big one for the Midwest is if solar continues to advance and we start doing larger and larger projects like what they’re doing in SW, what impact is that going to have on the operation of the system? Are you going to have load fluctuations during the day just like you have at night with wind? It’s fun.

**Marta:** Well, it’s not dull! Is there anything else that I haven’t asked that you think is important that I should know?

**Mike:** No.