

# February 17, 2011 NIST Smart Grid Privacy Subgroup Meeting Notes

Minutes by Rebecca Herold

Please send this distribution list any necessary corrections or additions.

Next full group teleconference meeting:

**Thursday March 3, 2011 at 11:00am est**

***NOTE: We are now meeting only on the 1<sup>st</sup> and 3<sup>rd</sup> Thursdays of each month***

Here are my summary notes from the meeting:

## 1. Meeting Notes

See all meeting minutes at <http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/CSCTGPrivacy>

## 2. Team Updates

- Privacy Use Cases Team: Christine Hertzog, Smart Grid Library (team lead)
  - Going to every other week format.
  - Have assigned use cases to team members.
  - Applying the OECD principles to the existing use cases. Following the template for consistency. Have around 1 ½ months of work to go to complete the use cases.
  
- PEV Team: Mike Coop, Hey Coop! (team lead)
  - Held both privacy and roaming calls last week.
  - Asking questions and researching, such as: Getting into any type of privacy model for roaming? Automated clearinghouses?
  - Gas station model simplifies because of well-defined models with credit card payments.
  - Other model looks similar to telcomm
  - Problems with 3300 utilities trying to coordinate. Germany is doing this but is having challenges. There will be less privacy impacts if we don't do that model.
  - Other issues: if you signed up at home for a demand/response or distributed resources program, the privacy issues are pretty well defined. When plugged in at home few issues. Other locations, issues. E.g., if parking lot has a contract and you charge there, what are the issues? Privacy discussions are largely driven by the roaming discussions. When charging PEVs away from home, during roaming, that is where the privacy issues come into play. What info about the vehicle is transmitted to other entities? Those standards are being developed. Will work with Christine on getting those use cases built.
  
- Third Party Team: Brent Struthers, Neustar (team lead); Jason reported in Brent's absence
  - Christine: Example of contracted versus non-contracted third party?
  - Jason: Non-contracted - If a customer contracted with a third party on their own, then asked the utility to share data with the 3<sup>rd</sup> party on the customer's account, this is a non-contracted 3<sup>rd</sup> party to the utility. Contracted - If utility is outsourcing some

services on their behalf, and the customer has not done it themselves. The utility should include provisions for a contracted third party.

- Katherine: Any deadline for getting the document finalized?
- Rebecca: No hard set time restrictions. Will discuss at next meeting in 2 weeks.
- Martha: Question on non-contracted 3<sup>rd</sup> party. It is the customer authorizing the disclosure to a third party? That would be explicit consent. Does the utility really need to do anything else? It is an explicit request from the customer.
- Jason: Perhaps this could be reworded to be more explicit. The main point is to make the customer aware of the risk. As a best practice, not as a law.
- Martha: Are there instances where it is not the customers asking for the sharing? Some other custodian to another non-contracted 3<sup>rd</sup> party? E.g., landlord, etc.
- Jason: Yes, an entity got a grant, promised government they will go to home and make the home's energy use more efficient. To prove this they must go to utility and get data. In that case the utility should get consent from the customer, or the utility may tell the entity to get explicit consent from the customer and send it to the utility.
- Martha: Wouldn't the utility need to tell the entity the customer names?
- Jason: Not necessarily.
- Christine H: Mulling over scenario looking at IP addresses, appliances that have IP addresses that are now online data as opposed to metered data. How differently will that type of data be managed? How will it be accessible by third parties? Voluntary by industry? By government recommendations?
- Jason: We don't want to just restate the security controls as listed in NISTIR. The question is, what should be done if the data will be shared? What needs to be done to ensure the levels of protections are preserved?
- Christine: Security controls not really concern, more the type of data, and how that is accessible. That is where potential scenarios come into play. Do we need to anticipate how to ensure sharing data with 3<sup>rd</sup> parties will be shared when the data was online data?
- Jason: Like when the data is on the Internet?
- Christine: Yes, like if the top 3 energy usage data in home is sending data to another party/service. E.g., home automation and home energy service and put the data automatically online. Some ability to control the data online. Those appliances would be transmitted data online. Service calls may be initiated based on the usage. The customer would have set up the relationship, without the utilities involved. Discrepancy between what the meter says and what the appliances say; a privacy issue? Does being online data change being usage data?
- Jason: The appliance data is the customers' data. They should have some agreement about the security protocols. That 3<sup>rd</sup> party should follow the same privacy rules as the utility. If that causes bill discrepancy, and data must be shared between the utility and the 3<sup>rd</sup> party, that could create problems.
- Lee Abers: The controls should be the same regardless of where the data is.
- Martha: So if data is coming online from the consumer, the consumer has control over the data, and they should be able to control who gets the data?
- Jason: The customer may choose where that data goes to; it's their data and they chose to give it to them. The 3<sup>rd</sup> party should have privacy in place.
- Lee A: Would expect to see a EULA in that case.
- Christine: that is ideal, but knowing state of online privacy for data right now doubtful. New bill submitted by California senator to get permission for online data sharing.
- Lee A: Not blind trust for the vendor.
- Martha: The FTC report, they want to make sure the customer is informed. The current notifications are not good, lengthy, and hard to understand. Maybe appliance

manufacturers putting some notice with their appliance. To help customers understand the issues involved. Does the customer enable?

- Christine: Customer either enables or does not enable. It is not automatically online.
- Jason: There will need to be some security activities done during the exchange. Just buying it and using it does not automatically put them in the service.
- Lee A: would like to see choices made available at the appliance level to allow them to stop being in a service as well.
- Christine: Cost factors are an issue.
- Rebecca: Will distribute
  
- Training and Awareness Team: Rebecca Herold (team lead)
  - New team being formed.
  - Team members so far: Tanya Brewer, Chris Kotting, Lee Abers, Brent Struthers, Amanda Stallings, Martha, Klaus, Lydia Dominion
  - Will send some information next week.
  
- NSTIC Team: Amanda Stallings, Ohio PUC (team lead)
  - Currently on hold until final NSTIC plan is released
  - No Word yet.
  
- Open discussion: privacy impacts of energy records access related to domestic violence
  - Privacy in the home impacted by smart energy apps: Discuss the following real-life scenario...
  - There are smart phone apps that can show the electric usage at a home. What happens if the husband batters his wife, and he is watching the electric usage at home using such an app to monitor his wife? He sees something in the energy usage that makes him think his wife is doing something he doesn't like and comes home and beats the wife. The electric bill is in his name. What, if anything, can be done to assist the battered wife? Related to smart grid privacy?
  - Tanya: It really falls under what we've talked about NISTIR; a type of surveillance.
  - Rebecca: App requirements?
  - Christine: All would depend upon the wife and if she filed a complaint?
  - Martha: If the husband's name is on the bill he has a right to the data. Any discussion about that?
  - Lydia: WHO owns the data?
  - Martha: State by state determines that
  - Lydia: If the husband owns the account, he can get the data
  - Jason: We talk at DTE about this. They will protect customers from strangers. Will try best to protect from general acquaintances. But if a family member is doing something, then the people in the home are responsible for how their relationships go. Another entity cannot help those in the home to protect all those in the home. Just a matter of money; rate payers will not want to pay for increases. People in the home should leave.
  - Martha: If a husband and wife are both the customers, would DTE be able to restrict the data to the husband?
  - Jason: They will not try to make any restrictions.
  - Tanya: What if a restraining order was against the husband? And the utility give data to the husband?
  - Jason: Restraining order typically physical would need to be another type of restriction to prevent data sharing.
  - Martha: Catch 22 control issue. Battered usually don't leave.

- Jason: Understand and it's tragic, but it is not the responsibility of the utility. Would everyone want to pay extra to prevent this, if it could be? Most wouldn't. That's what it would come down to.
- Rebecca: Do utilities know of the apps, or work with the vendors?
- Jason: Generally not
- Amanda: Getting into civil and criminal law. Varies from state to state. If restraining order exists, it doesn't impact what he reads in the app. It shouldn't matter. He will just stop paying the bill.
- Lee A: can access bank info through apps. How do they do this? We gave the third party to the app vendor.
  
- Miscellaneous
  - Next full group meeting will be Thursday, March 3.
  - Other?
  - North American Energy Standards Board (NAESB) meeting yesterday afternoon. I spoke for around 15 minutes about our group and our privacy volume in NISTIR 7628. I was struck by the large amount of talk regarding sharing information with third parties. Tanya, Chris Kotting and Aryah Fishman were also there. Tanya, could you provide a little more information about the role of NAESB?
  - Chris Kotting: NAESB started as a voluntary org to establish standards for first gas, then for gas and electricity in wholesale and retail. NAESB views everything in 4 quadrants wholesale retail gas electricity. They had a request from ??? [NOTE: I did not get this captured]for creating standards for the things that must be done to enable communications of data with 3<sup>rd</sup> parties, consistent with security controls, etc. They are writing up this standard now, and it is considered as a voluntary standard, but FERC may reference it and require it within the FERC rule. At retail level same thing can happen within the state PUCs. States can also use as a starting point.

Thanks,

Rebecca