

Communication in the Digital World Requires Cyber Security.



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Grandma Vivian would be the first to tell you that the art of writing letters and sending them in the mail has been lost. During one of my recent visits with her, she was going through her greeting card collection.

Her stash would put any Hallmark store to shame, as she is equipped for any occasion. She looked at me and said, you need to go through these and take what you want. As I pulled out several, she then bolstered, "There is a condition... you have to send them this year with a note inside."

Oh, the pressure of those words! I don't remember the last time I sent a handwritten letter in the mail, and then under her breath I heard her say, "It means a lot and is very important to people my age to get these in the mail." As that statement held heavy, my mind began to wander on how communicating that way has all but stalled with social media, texting, and email.

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I think it is safe to say that almost everyone we know has an email address. Many of us can type faster than we can write, and what used to take days is now conveyed in seconds with the world wide web, changing the ways we communicate and perform commerce forever.

While these forms of communication greatly expedite all our day-to-day activities, it also comes with a whole new set of

challenges. There is an unfathomable amount of information being exchanged every second online, and as seen recently in the news, scammers want this information for personal gain.

For B-Y Electric, this is where the Information Technology team at East River Electric comes in. Their dedicated team of I.T. experts have our back when defending against online threats. And at the head of this team is Jeff May, East River's Chief Information Officer. We recently spoke with Jeff for more information on who is conducting these attacks, what they are looking for, and how to prevent such invasions of privacy.

B-Y: Who is behind these attacks and why are they doing it?

J.M.: From what we've learned so far, the culprits behind the Colonial Pipeline attack are an organization that goes by the name Darkside. They offer Ransomware as a service that cybercriminals can use against companies. Ransomware is a type of malware that encrypts a victim's computer files and blocks them from being accessed. The purpose of these attacks is to extort money, if victims want access to their files, they pay a ransom.

B-Y: How do these things happen? Is it like what we see on TV?

J.M.: Most of the time Ransomware is spread through phishing emails. These emails are designed to trick users into opening an infected attachment or link. Once opened typically the Ransomware will begin working in the background, sometimes it might wait several weeks or months before it begins encrypting files.

Some movies and TV shows are more realistic than others, but in the end they all end with the computer system being rendered useless.

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For more information, call our office at (605) 463-2507 or email horst@byelectric.com

TIME IT TAKES A HACKER TO BRUTE FORCE YOUR PASSWORD

Number of Characters	Numbers Only	Lowercase Letters	Upper and Lowercase Letters	Numbers, Upper and Lowercase Letters	Numbers, Upper and Lowercase Letters, Symbols
4	Instantly	Instantly	Instantly	Instantly	Instantly
5	Instantly	Instantly	Instantly	Instantly	Instantly
6	Instantly	Instantly	Instantly	1 sec	5 secs
7	Instantly	Instantly	25 secs	1 min	6 mins
8	Instantly	5 secs	22 mins	1 hour	8 hours
9	Instantly	2 mins	19 hours	3 days	3 weeks
10	Instantly	58 mins	1 month	7 months	5 years
11	2 secs	1 day	5 years	41 years	400 years
12	25 secs	3 weeks	300 years	2k years	34k years
13	4 mins	1 year	16k years	100k years	2m years
14	41 mins	51 years	800k years	9m years	200m years
15	6 hours	1k years	43m years	600m years	15 bn years
16	2 days	34k years	2bn years	37bn years	1tn years
17	4 weeks	800k years	100bn years	2tn years	93tn years
18	9 months	23m years	6tn years	100 tn years	7qd years



-Data sourced from HowSecureisMyPassword.net

Manager's Column Continued

B-Y: Is the electric grid at risk of being hacked like the Colonial Pipeline was?

J.M.: Larger Electric Utilities must comply with requirements provided by the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC). Many of these requirements deal directly with securing the Electric Grid and are designed to help protect its integrity.

Utilities face constant scans and attacks that our cyber security protocols are designed to protect against. We are all at risk of being hacked, but we work diligently to protect our system.

B-Y: What are we doing to prevent these risks?

J.M.: By having a formal Cyber Security plan and following industry best practices, we can help mitigate risks.

B-Y: What is the biggest challenge or threat you face?

J.M.: Every organization is facing the threat of attack, but one area that is just as critical is social engineering. Social engineering through phone calls or infected emails is an easy way to gather information or compromise a system. Staying vigilant is an important way to protect against this.

B-Y: What steps has B-Y Electric taken to protect the electric system and their members information?

J.M.: Through continued cyber

training and the alertness of their staff, B-Y Electric has been proactive when it comes to Cyber Security. By partnering with us and participating in our Cyber and I.T. program, they are fully engaged in protecting the electric system and member information.

B-Y: Why should we be concerned with hackers? They won't be interested in a small utility in South Dakota.

J.M.: Any device that's connected to the internet could be considered a target. Once it's on the web, location is meaningless. It looks the same and faces the same threats whether it's in Tabor, SD or London.

B-Y: What are the top few things we can all do to protect our personal information?

J.M.:

- Create a strong password and change it on a regular basis.
- Don't use the same password for multiple accounts.
- Use a trusted password manager.
- Use caution when clicking on links or attachments.
- Keep your antivirus and software up to date.

As you can see, this is some very technical stuff with very serious consequences. Being robbed or held hostage by a person that can be across the room or across the world from you is a very unsettling feeling. B-Y Electric is fortunate to have such a dedicated and knowledgeable team as East River's to ensure the safety and reliability of our electric grid. Just another step B-Y Electric and East River Electric are taking to ensure you are provided with the best service we can possibly provide.