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# Click! 10 Year Reflection

By Diane Lachel

If you enjoy an occasional “Where are they now?” retrospective, then you’ll enjoy this ten-year ride through a government-initiated and precedent-setting history “book” called the Evolution of Tacoma Power’s Click! Network.

## Chapter One – The Community Need

Once upon a time in the 1990s, Tacoma, Washington was unfortunately well-known for its lack of basic telecommunication services. What that meant for Tacoma Power, a large, nearly 100-year old municipal utility serving the area, was that if it wanted to evolve from a mechanical operation to one using microprocessors, it would have to author its own future. Tacoma Power wanted to monitor substations and assess the health of its system. It wanted to remotely read electric meters and be a leader in efficient load management. Yet it was stuck in the dark ages in a City neglected by telecommunication providers.

During that time, business owners wanting to locate to the city had to wait 12 to 18 months for a phone line. Residents who ordered cable TV had a lowly 38 channels to choose from, delivered over a 25-year-old one-way cable system. North and south of Tacoma, along I-5, other businesses and

home-owners enjoyed many more options because the telecommunication systems that served their areas had been upgraded. It was this lack of connectivity, the changing utility industry and the emergence of the Internet that begins Click! Network’s story.

## Chapter Two – The Utility’s Analysis

In October 1992, President Bush signed the Energy Act into law, which called for measures that would move the electric industry towards deregulation. For the first time in history, Tacoma Power faced potential competition. The utility also faced new regulations in addition to local electric load growth and increased operational costs. To remain viable in the potential new environment, Tacoma Power would have to upgrade its service reliability. Rather than relying on customer calls, paper maps and push-pins to locate outages, the utility would need a more sophisticated way to operate.

The utility needed to be able to monitor its distribution network in real-time and automatically reroute power when faults occurred.

A year later, a team of Tacoma Power engineers and analysts began their quest. The team researched businesses that were successful after deregulation, focusing primarily on the banking and airline industries. Three “must-do” themes emerged from the businesses that thrived in deregulated environments:

1. Develop internal marketing capabilities (find out what your customers want)
2. Flatten your organization and get closer to the customer
3. Secure connectivity in order to communicate quickly and efficiently with internal and external customers.

Throughout 1994 and 1995, Tacoma Power’s leaders re-engineered the organization. They implemented themes one and two over just a couple of year’s time.

And now we pick up the story with theme number three - connectivity. During the research phase, the team met with the two local wire line providers, the telephone and the cable company, to secure the utility’s telecommunication needs. Neither service provider had the capacity to connect the utility’s substations for transporting critical data throughout the service territory back to Tacoma Power’s Energy Control Center. And neither provider had plans to upgrade their infrastructure anytime soon. No one was making Tacoma Power’s progress very easy. But that’s when true innovators really get motivated.

### **Chapter Three – The Initial Plan**

In 1995, select community and business leaders along with an outside consulting firm added their marketing and economic development expertise to the utility’s efforts by participating in a feasibility study. Timing was everything. Another regulatory

overhaul being debated in the other Washington at the time – telecommunications – played into the utility’s overall strategy. With the passage of the Telecommunications Act of 1996, Congress intended for wire line providers to compete with each other and allowed new entrants into the business, like power companies. Tacoma Power’s consultant suggested the utility add commercial services to its plan, with revenue offsetting the cost of construction. That study, with new commercial services added to it, offered the first glimpse of what was possible: A previously underserved area could be transformed by a robust, reliable set of fiber-rich service rings built around the city in order to meet Tacoma Power’s operational needs and to provide services not currently available.

There was a huge community need. The utility had a concept. And the Feds smoothed the way for a plan.

### **Chapter Four – Testing the Concept**

After four years of research, data gathering and analysis, it was then time to take the study on the road. Tacoma Power Superintendent Steve Klein and his project manager began the public road show with meetings throughout the area and often awoke the next morning to headlines like “Possible cable venture worries Tacoma council” (The News Tribune 5/22/96), “City’s cable TV plans suggest competition is in order” (Business Examiner 8/5/96), and eventually “Fiber optic network could be a boon” (The News Tribune 2/23/97). After eleven months of public process steeped in controversy, the Tacoma Public Utility Board and the Tacoma City Council unanimously authorized the construction of a telecommunications network.



That was April 1997. Ten years ago. Let me tell you what happened next, even though it’s a blur.

### **Chapter Five – Knees and Elbows**

Klein hired Deb Stewart, one of the most experienced cable TV and telecommunications experts in the nation, to lead the charge. Her credentials included building a state-of-the-art network in Castro Valley, California, Viacom Cable’s fiber showcase. She specialized in start-ups. She had 20+ years of industry connections, spirited drive and the stomach to navigate the public arena – although that lasted just a few years. But that’s all that was necessary to get the vision off the ground, or in the ground, in some cases. Deb led a team of seasoned former Viacom, TCI and US West employees who created something from nothing. Literally.

“It was a swirl of activity, we worked 24 hours a day, it seemed,” said Cyndi Wikstrom, who was hired early on and now serves as general manager. “I negotiated programming contracts, set up three brand new business lines from scratch, relied on what I’d learned during my previous jobs (with TCI and US West) and eventually figured out ways to work in a very challenging public environment to get the job done.”

‘Knees and elbows’ became the descriptive phrase when asked how the tight band of telecom experts accomplished all that was required in such short order. From policymaker approval in April 1997 to its first broadband connection five months later, to its first cable TV customer in July 1998, Click! Network staff accomplished what some might have called a mission impossible. They constructed hundreds of miles of fiber and coaxial cable, built a head-end with hundreds of channels, negotiated cable TV and telecommunications franchises, designed and built a carrier-grade high-speed data network capable of serving the largest Tacoma institutions, built an institutional

## More than 100 schools, public safety and other government buildings receive their video, voice and/or data over CityNet, the institutional network constructed by Click! that saves the government entities more than half a million dollars each year.

network serving schools, public safety facilities and government buildings, offered a high-speed Internet open platform for multiple ISPs, provided much needed services in a previously underserved area and made history along the way.

### **Chapter Six – America's #1 Wired City**

Fiber placement throughout the city was rampant, visible and a viable tool for economic development. It eventually inspired Tacoma's economic development director to market the abundance. Click! Network was more than just transporting video, voice and data. The network became a way for the city to spiff up its high-tech image. With the help of a public relations firm, the slogan "America's # 1 Wired City" was coined. Boat-loads of positive press and media attention jettisoned the city into glossy magazines and on the radar of investors. A renaissance was underway. The University of Washington's Technology Institute found a home in newly-wired Tacoma. The Chamber of Commerce counted more than 100 new businesses that located in the area in 1999 and 2000, due in large part to access of improved telecommunication services. Many start-ups hung their shingles along previously gutted streets. At least one major employer decided to stay in Tacoma partly because of the new telecom services. A renovated art museum, a world class glass museum, new restaurants and more Class A office space followed. The city was buzzing.

Curious things happen when competition enters a market. The changes can be profound and lasting. After the launch of Click!, both TCI

and US West upgraded their facilities. After those telecom providers changed hands, AT&T and Comcast made additional improvements as well. More choices for consumers have driven prices down. Dramatically. Residents living in areas beyond Click! Network's footprint lament the fact that their Internet and cable bills are 35 – 50 percent higher. Adjacent smaller power companies ask what it would take to extend the network to help them improve their operations. Tacoma Power's bold investment in a multi-application telecommunications network pays off in a variety of ways.

### **Chapter Seven – The Future is Here**

Ten years later, Tacoma is a vibrant and happening city. Tacoma Power has connected its substations to the supervisory control and data acquisition (SCADA) portion of the network. Nearly 10,000 digital two-way electric meters in commercial and residential locations are in place sending much needed data to customers and Tacoma Power while providing the ability to perform applications remotely. The hybrid fiber coaxial network allows many power customers to pay for services in advance and to control and monitor their usage through a program called Pay-As-You-Go. Sister utility Tacoma Water is testing new wireless meters with the data collected and transported over Click! Network. Tacoma Power is more nimble in its outage detection and response time, and uses load data for planning purposes as the area is in an economic development upswing. The network has expanded beyond Tacoma and follows the utility's service area in University Place, Fircrest, Lakewood,

Fife and Pierce County. More than 100 schools, public safety and other government buildings receive their video, voice and/or data over CityNet, the institutional network constructed by Click! that saves the government entities more than half a million dollars each year. Residents in Tacoma's downtown core have cable TV for the first time in history. Businesses have multiple high-speed Internet options for the first time. Click! Network enjoys stellar annual customer service survey results. Click! currently serves 25,000 cable TV customers, most of which subscribe to digital services, 17,000 end-use Internet customers served by three retail ISP's and hundreds of high-speed data circuits for businesses which are installed within 30 days of a contract being signed. All telecom providers in the area have improved their infrastructure and customer service operations because of competition. Customers have choices. Although it seems like we could now write "The End," we know there's even more to come in the future.

### **Chapter Eight – The Smart Grid**

Tacoma Public Utilities (TPU) and Tacoma Power are both under new leadership these days. Mark Crisson, former Director of TPU, now heads up the American Public Power Association in Washington, D.C. His successor, Bill Gaines, has decades of experience in the power industry and is especially excited about Click! Network's role in the future.

"By leveraging our telecommunications network, we're well positioned to meet our community's needs and continue providing some of the lowest cost power in the country," said Gaines.

“We are also well positioned for further developing our smart grid.”

Gary Armfield, the new Tacoma Power Superintendent, has 30+ years at the utility. As the former manager of the utility’s transmission and distribution section, Armfield was a key leader in ensuring Click! was constructed. In addition to promoting Cyndi Wikstrom to general manager of Click!, he understands the enormous potential of a reliable network for the utility’s use and is leading the strategic planning that will further define Tacoma Power’s future application of the smart grid.

Simply stated, smart grids use intelligent electrons to manage efficient

use of power sources directly to the consumer. Going forward, power companies will either construct what Tacoma Power has or lease the bandwidth from a private provider to accomplish their operational goals. But that’s someone else’s story. *The Evolution of Tacoma Power’s Click!* Network has already been written. Stay tuned for the sequel. ■

*Diane Lachel, Click! Network’s Government and Community Relations Manager, joined Tacoma Power in 1997 and has 37 years of telecommunications experience in the Pacific Northwest. Previously she held a regional leadership position with*

*Viacom Cable and was responsible for government and media relations for systems serving 425,000 customers and 70 franchises. She has expertise in technical production and communications planning. She served as past president, treasurer and director of the Washington State Cable Communications Association. Away from work, Diane volunteers with the YWCA Pierce County and Harmony Hill, a cancer retreat center focused on mind/body/spirit healing. Diane helps her partner operate an organic farm and community supported agriculture subscription service (CSA) and she is a practicing shaman, leading sweat lodges and other ceremonies.*

## REEL TIPS

### *Fresh Ideas for Programmers*

- Keep a first aid kit in your run bag. Band aids, safety tape and other items can be used to repair set pieces and props. The items can be used for many different types of “emergencies.”
- Ask your city or county attorney to review your talent releases and other production forms on a yearly basis. Make sure the internet and other forms of broadband communication are included in your permissions if you are streaming or podcasting.
- Remember to check your talent’s background for distractions or detractions. Make sure you check your talent’s field of vision and that nothing distracts or detracts their ability to focus on their topic of discussion.
- When working with children, make the child the most important person on set. Treat them with respect, guidance and remember to have fun! You may have to have games, age appropriate snacks, meals and drinks. Do not forget to have your release form signed by the parent or legal guardian.
- When working with pre-teens and adolescents, give them a tour of the control room and post production suite. Ask their opinion and introduce them to the crew. Make them feel like a part of the production and listen to them. Teenagers can bring some interesting and innovative ideas about how to reach other teens.
- Keep apparel on hand in your production studio for senior staff just in case a clothing disaster occurs.