

MEMORANDUM

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Date: May 4, 2000

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Subject: CC Docket 99-294

Please place the following document into the record of CC Docket 99-294. If you require further information, please feel free to contact me at 202-418-1394. Thank you for your assistance.

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**FEDERAL/STATE JOINT CONFERENCE on ADVANCED SERVICE
WESTERN REGIONAL FIELD TRIPS and HEARINGS
APRIL 14 - 17, 2000**

Day One: April 14, 2000, Tacoma, Washington

Location: Tacoma Public Utilities Auditorium, 3628 South 35th Street,
Tacoma, WA

Directions: From I-5 take Highway 16 West to Bremerton. Take Union Avenue
Exit. Turn left on Union at bottom of ramp, proceed about a mile to
South 35th Street, the multi-story Power, Light, and Water building
is on the right-hand corner across the street. There are various
marked public parking areas, follow signs at front entrance to
Auditorium.
Or, call: (253) 502 – 8205 for assistance.

8:30 Shuttle bus at Tacoma Sheraton will transport visiting conferees to
the **Location**.

9-10:30 **CLICK! Network** project tour – Tacoma Power
– example of local government-owned power utility installing
competitive fiber facilities to deliver advanced services.

Steve Klein – Superintendent of Tacoma Power – investing in
bandwidth by a power utility, open access issues.

10:30-10:45 Break

10:45-11 Opening Remarks
The Honorable Susan Ness – Commissioner, Federal
Communications Commission
The Honorable Nan Thompson – Chair, Regulatory Commission
of Alaska
The Honorable Marilyn Showalter – Chairwoman, Washington
Utilities and Transportation Commission

11- 12:15 **Forks Project** – small logging town on the Olympic Peninsula that
has facilitated alliance between LEC, local utility district, hospital,
and school district to get community wired.

Don Dennis – Government Affairs Manager, Century Telephone –
introductions, overview

John Jones – Superintendent of Quilayute Valley School District –
K – 20, consortia, E-Rate perspectives on distance learning, and
joint efforts with Alaskan entities.

Roger Harrison – Forks Community Hospital, Director of Information Services – Telemedicine perspective.

Rod Fleck – Forks City Attorney/Planner – discuss highlights of facilitated partnership/strategy.

12:15 – 1:15 Lunch – there will be a buffet at the **Location**, with a presentation by Teledesic which will highlight satellite based solutions.

1:15 – 2:30 **Satsop** – rural economic development success story.

David Danner – Governor Locke's Executive Policy Advisor on Energy and Telecommunications – Making telecommunications work for rural Washington.

Bo Wandell – President, SafeHarbor.com – providing companies with innovative web-based Internet support services.

Tami Garrow -Director of Business Development, Grays Harbor Public Development Authority - creating a business and technology park on the site of an unfinished nuclear plant, and the key role that connectivity and bandwidth plays. See <http://www.satsop.com>

2:30- 2:45 Break

2:45-4:15 **The View From Eastern Washington** – incentives and strategies for investing in advanced services infrastructure.

Robert C. Lahmann - Transmission Business Line Account Executive, Bonneville Power Administration – using fiber optics for public utility, community purposes in the Northwest

John Andrist – CEO, North Cascades Broadcasting, Inc., CEO NCI Data.Com, Inc. – bringing high speed Internet services to rural Washington using wireless applications, and becoming a CLEC.

Greg Marney – Senior Executive, NoahNet.Net - small computer consulting firm provides Web Site Hosting, Network Design & Analysis, Project Management, and Network Support.

4:15 – 4:45 Public Comment.

April 14, 2000

**BIOS
AND STATEMENTS
Tacoma, Washington**

Steven J. Klein – Tacoma Power, Superintendent

Steven J. Klein, Tacoma Power Superintendent, assumed his position in June 1993. He attended Western Washington University and the University of Washington, graduating in 1977 with a B.S. in Electrical Engineering. He was hired by Tacoma Public Utilities in 1978 and has worked in both the Engineering and Power Management Sections of the Utilities Power Division. From 1988 to 1993 Mr. Klein was the Power Manager. He is active with several regional industry groups having served as a past Chairman of the Public Generating Pool. Steve is the immediate past Chairman of the Executive Committee of the Public Power Council and serves on the Board of Directors of the Northwest Public Power Association and the Pacific Northwest Utilities Conference Committee.

Click! Network

Click! Network is provided by Tacoma Power. Tacoma Power was created by citizens more than 100 years ago to meet community needs for electricity. They believed that public ownership and local control result in higher quality services. Click! Network evolved through similar foresight. Tacoma Power originally planned to build a fiber-optic network to control its substations. Further review indicated that expanding the network and offering a wide range of telecommunications services would benefit our customers and our community. Click! Network offers the greater Tacoma, Washington, area more choices for cable TV, Internet and broadband services. It creates new options for existing Tacoma area businesses and attracts new businesses to our community. We think the possibilities for the network are just beginning to emerge.

**Federal/State 706 Joint
Conference Field
Hearing Two**

Broadband Telecommunications

By Steven J. Klein

April 14, 2000

The genesis for a robust open-access broadband telecommunications system in Tacoma was the Energy Policy Act of 1992 (EPAct92)

Faced with industry restructuring and competition Tacoma Power sought to:

- Increase efficiency
- Enhance electric system reliability and outage response
- Enhance power quality
- Offer new and innovative products & services
- Provide technical & service proficiency necessary to meet restructured industry requirements (real-time pricing, transaction accounting, etc.)
- Retain or grow market share

The Winning Strategy

- Build a broadband communications system throughout the service area
- Seek telecommunication partners

The Partner Search

- Incumbent local phone system
 - Old infrastructure with deteriorating service
 - Unwilling to invest in upgrade and provide open-access
- Incumbent cable TV system
 - Old, noisy cable plant with limited capacity
 - Strategy to play real estate monopoly – not upgrade (profit through selling the system not the service)

The Partner Search (cont.)

- **Competitive Access Provider's (CAP)**
 - Interested in “cherry picking” a limited number of high volume, Fortune 500 type business customers
- **Wireless Broadband (DBS)**
 - Oriented towards entertainment broadcast and are impractical from an economic and technical perspective for high speed data transport.

Partnership Search Conclusion

Tacoma Power could not find a viable partner and concluded we would have to build a two-way broadband telecommunications system ourselves to reach every customer in our service area.

Third Party Review of Our Concept

- December 1995, SRI hired to:
 - Evaluate the strategy and associated benefits, costs and risks
- Spring 1996, SRI issued report that:
 - recommended building HFC system
 - Adding incremental capacity for other service

The Business Plan

- Hired team of telecommunications technology, business and marketing consultants to assist in the development of a Telecommunication Business Plan
- Policymakers adopted plan in April 1997
- Construction began in January 1998

How Tacoma Power Was Able To Do It

- Confidence created by nearly 5 years of thorough study
- Solid business plan with multiple revenue streams
- Ability to leverage existing assets
- Successful 100+ year old utility business
- Cash reserves created in wholesale power market
- Overwhelming customer and community support

Click! Network Applications

- Electric system distribution automation, market access and real-time
- Cable television, digital audio and Internet over television
- Broadband services with customized point-to-point connectivity, virtual private networks & point-to-multipoint connections
- Internet over cable modem

Tacoma Power's Telecommunication System

- Multiple fiber optic rings running throughout service area
- Secure and redundant fiber optic system with SONET electronics
- Fiber rings support two-way 750 MHz broadband hybrid fiber coax system in residential areas reaching all homes

Evolution of Electrocomm

- Electric and telecommunication industry restructuring coupled with technology innovation, global market forces and infrastructure and end use synergies have led to the evolution of an entity called **ELECTROCOMM**

Electrocomm Definition

- Electrocomm is a regulated entity that owns and operates an open-access discrete local distribution infrastructure that delivers the smart (data) and dumb (energy) electrons from unregulated content supplying entities to the end consumers

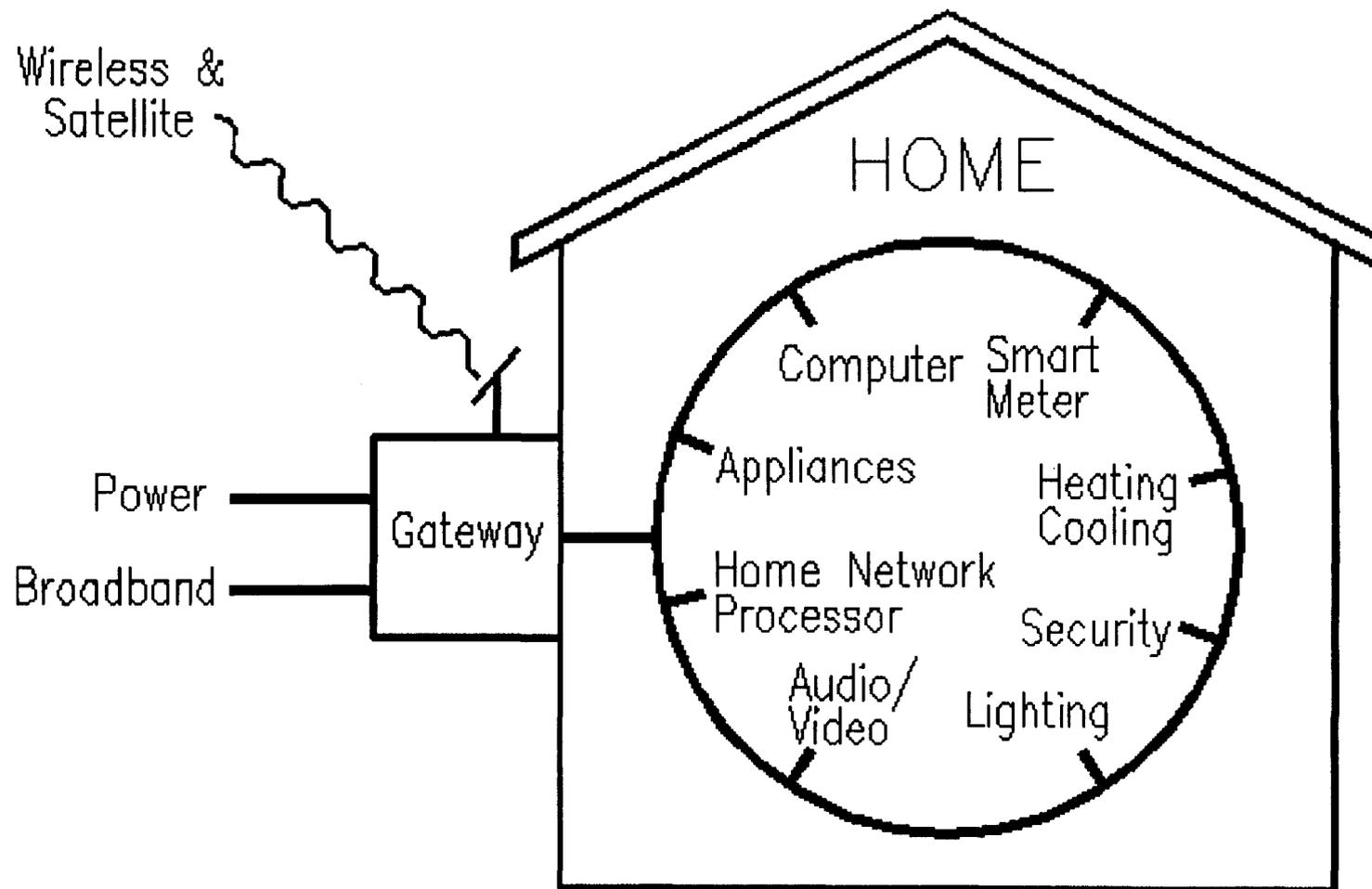
Electrocomm Purpose

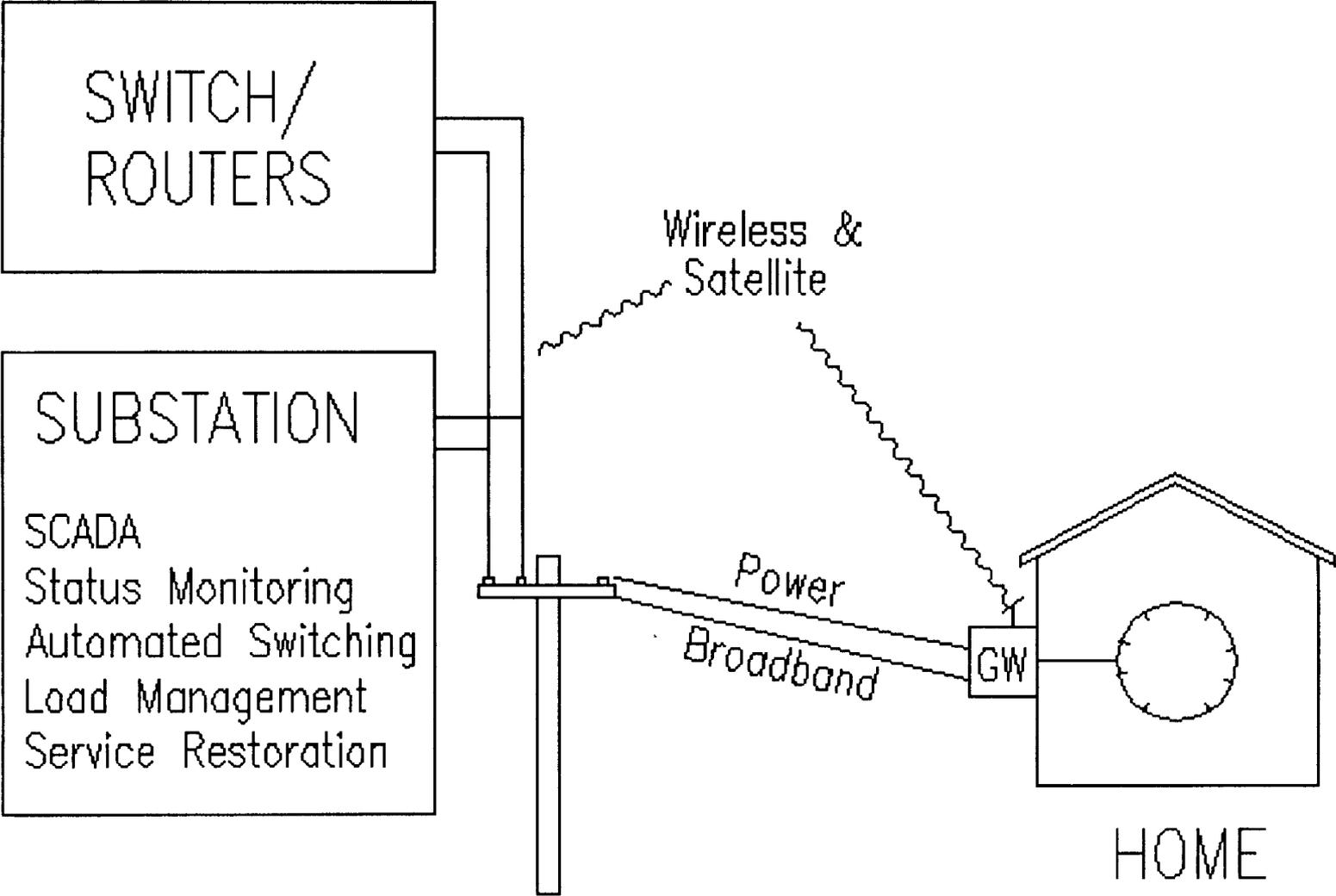
- Electrocomms leverage their assets (poles, substations, conduit, right-of-ways, customer base, etc.) to serve their distribution customers in the most efficient and reliable manner

- Electrocomms can justify “last mile” broadband buildout to customers’ premises because:
 - Existing valued customer
 - Leverage existing assets
 - Provides direct communication link with customer and equipment
 - Enables capture of efficiencies and regulatory compliance with restructured industry(automated meter reading, demand-side management, real-time power pricing, power commodity transaction & accounting, remote connects/disconnects)
 - Allows for revenue diversification and growth

Electrocomm Thoughts

- Electric industry shifting from physical asset world to an intangible, transparent world in which electrons themselves carry enormous added value
- Utilization of and linkage to cutting edge technology will be necessary to command customers attention
- Growth of micro processor-based society demands premium quality power delivery
- Development of distributed generation necessitates integrated electric/telecommunications network
- Electron technologies and applications converging to single point-of-entry to customer premises





Click! Power Advantage

- All major power substations wired to fiber network
- Installing computerized control & data acquisition systems in all power substations
- Pilot program for automated outage isolation and service restoration
- Pilot program for electrocomm gateway into premises & associated automated services & management
- Replacing SCADA master computer with state-of-the-art technology utilizing high bandwidth fiber optic based communication system.