



# TWACS<sup>®</sup> by DCSI

- ① Who is DCSI?
- ② What is our Vision?
- ③ What is TWACS<sup>®</sup>?
- ④ Utility Success Stories
- ⑤ Success Factors for Ontario!



# Who is DCSI?

**The Utility Industry's Leading Advanced Metering Supplier\* and has Sold nearly Eight Million Two-Way Devices**

\*per Chartwell, summer 2004

- ① Investor-Owned Utilities
- ① Combination Utilities (E+G or W)
- ① Canadian Utilities
- ① Electric Cooperatives
- ① Large Public Power Utilities
- ① Municipal Utilities



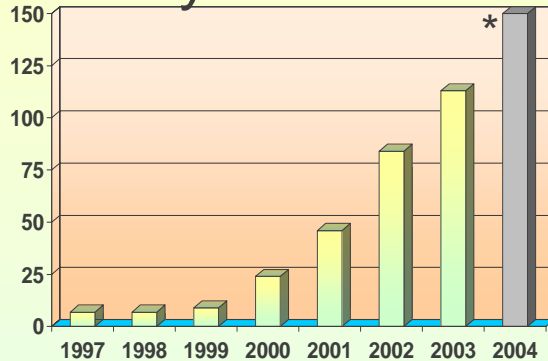
# TWACS Milestones

- 1987: Won 4 Significant Two-Way Load Control Systems
- 1994: Won 2 of the Earliest Fixed Network AMR Contracts, one for full-system AMR at ATCO Electric (Alberta)
- 1998: AMR Orders from Largest US Public Power (PREPA) and Largest Electric Coop (Pedernales Electric Cooperative)
- 1999: Innovation: Hourly Interval Capability for all Meters
- 2000: Wisconsin Public Service and 10 Electric Cooperatives
- 2001: Expanded Presence among Large Cooperatives
- 2002: Won Largest Two-Way AMR System at PPL (1.3M)
- 2002: Exceeded 1 Million Units Shipped/Year
- 2002: Market Leadership in Fixed Network and Cooperatives
- 2003: 2 Systems exceed 1M Meters; Over 100 Cooperatives
- 2003: 3 Utilities use System to Recover from Hurricanes
- 2003: Exceeded 50% of Fixed Network AMR Market Share
- 2004: Largest Advanced Metering System in the World

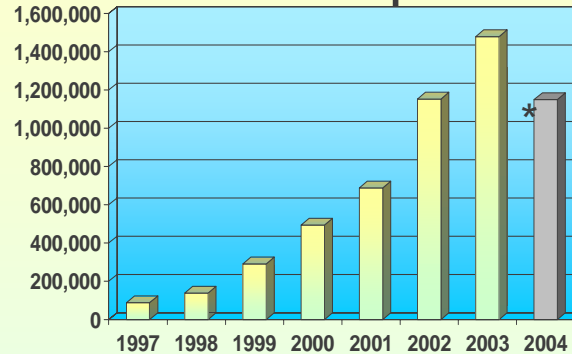


# Managing Growth at DCSI

## Utility Customers

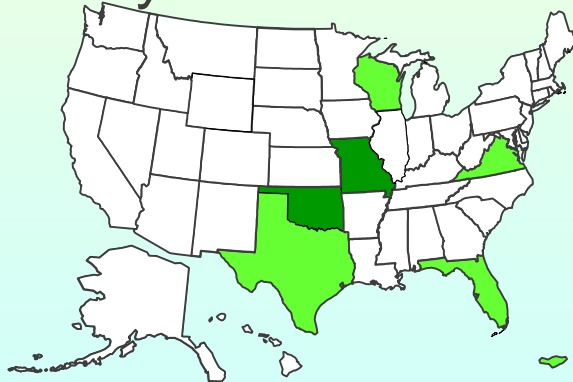


## Annual Shipments

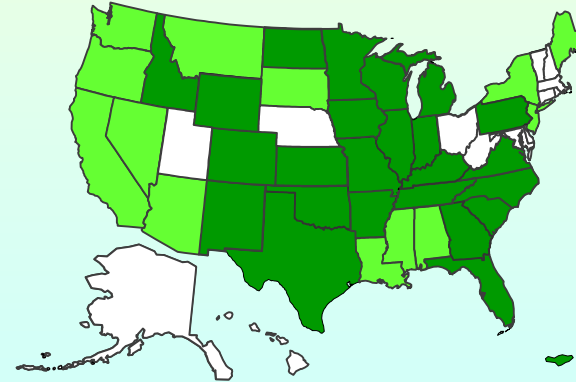


\*Through Aug. 2004

## Systems in 2000



## So Far in 2004



**Financial Strength**

Stock Price (NYSE:ESE)



People: Grew Staff by >4X  
 Processes: ISO 9001:2002  
 Performance: Industry Leading  
 Fixed Network Technology



# What is our Vision?

## “It’s Not Just About Reading Meters”

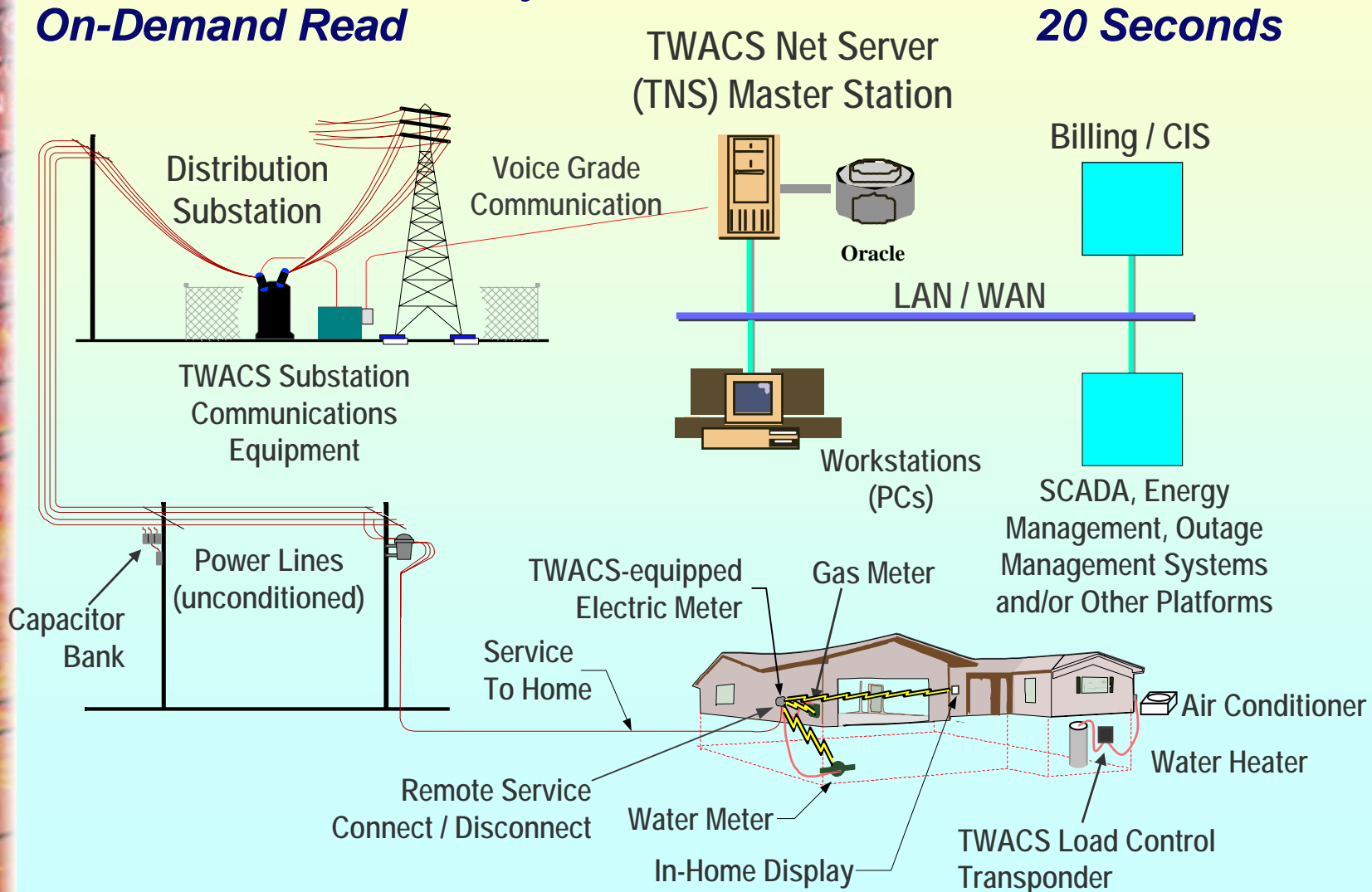
DCSI provides the industry’s most advanced, high value products, services and solutions that enable the total transformation of the electricity market and the energy delivery business around automation through affordable two-way communication and control

- ④ DCSI offers the market the most robust, pervasive, highest performance two-way communication capability in the industry
- ④ DCSI provides solutions to enable utilities to improve system efficiency, customer service and delivery reliability
- ④ DCSI uses information and control to save money by creating a real-time balance between energy supply and demand
- ④ DCSI enables consumers to make informed choices on how and when to utilize energy
- ④ DCSI provides energy suppliers with accurate, specific data on individual time differentiated consumption



# What is TWACS?

## Let's Build a TWACS System On-Demand Read



# *The Industry's Most Comprehensive Existing Advanced Metering Solution*

- ① TNS master station software
- ① SCE substation communication equipment
- ① IMT-3H module for mechanical meters
- ① EMT-3C module for CENTRON<sup>®</sup> meter
- ① EMT-3A module for ALTIMUS<sup>™</sup> meter
- ① CMT-SX module for L+G S4 meter
- ① CMT-VEC module for Itron VECTRON<sup>®</sup>
- ① Three Port IMT-3H module for water, gas and/or propane metering (wired)
- ① LCT – Load Control Transponder
- ① Interfaces to other utility IT platforms

\*Most metering solutions are Measurement Canada approved





# *Coupled with New, Innovative System Extensions*

- ① DSI Disconnect Switch Interbase
- ① OASys™ Outage Assessment System
- ① EMT-3F module for L+G Focus™ digital meter
- ① EMT-3G module for GE I210 digital meter
- ① CMT-SEN module for Itron Sentinel™ solid-state multifunctional meter
- ① EMT-R / RMT-R short-hop wireless for water, gas and/or propane metering
- ① Pre-Pay Metering: acquired CIC Global
  - Using traditional card reading technology
  - Migrating to “virtual token” using TWACS system solution
  - Including path to In-Home Display

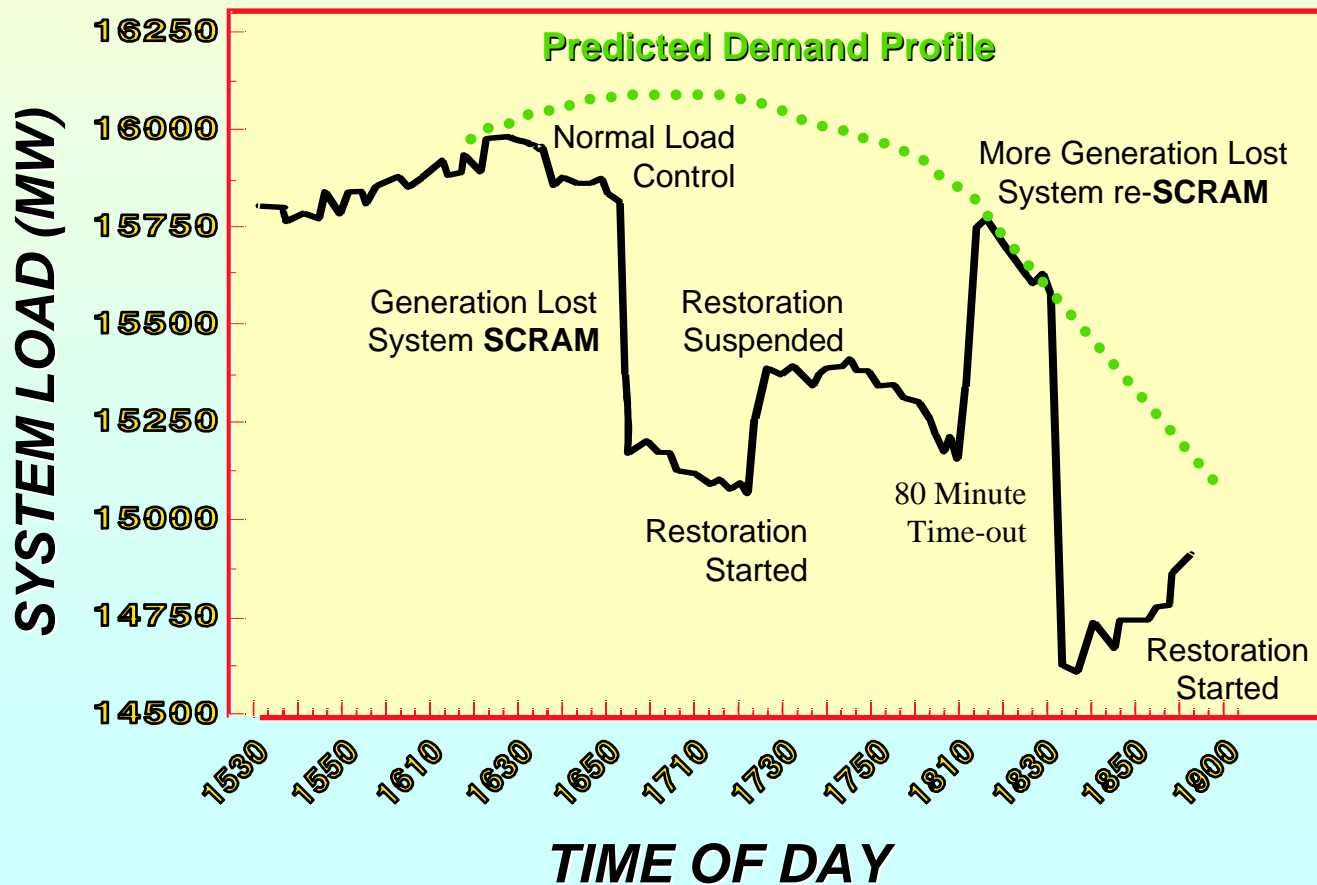


# Utility Success Stories

- Ⓢ ATCO – First full Fixed Network system; used for Load Profiling and to meet Alberta’s metering requirements. ATCO reads electric, gas & water meters with TWACS®
- Ⓢ Bangor Hydro – Fast install of 100K+ meters in 7 months
- Ⓢ FPL – Largest load control system in North America, at over 2,000 MW, has reduced the need for construction of power plants since inception in 1987
- Ⓢ Idaho Power – First phase of 100% interval retrieval system
- Ⓢ PPL – At 1.3 electric million meters, the largest fully interval-capable two-way fixed network system in North America. On schedule for completion this Fall
- Ⓢ PREPA – Largest Public Power AMR system in North America at just over 1 Million metering points
- Ⓢ Well over 100 Electric Cooperatives – Sizes range from 5,000 consumers to nearly 200,000
- Ⓢ WPS – Partnered to create full-system hourly interval collection to achieve strategy of “Customer Intimacy”. WPS reads electric, gas & water meters with TWACS®



# Load Control at FPL



**Over 975  
Megawatts  
Shed in 60  
Seconds**

**August  
1995**

**Now over  
2,000 MW  
Under  
Control**



# Success Factors for Ontario

- ① Practical, Proven and Affordable Advanced Metering Solutions are Available Today to Help OEB Achieve its Energy Policy Goals
- ② The TWACS® Technology is Robust and Ready for Rapid and Reliable Large-Scale Deployment
- ③ DCSI has the Most Complete Solution for 99%+ of Ontario's Consumers, both Residential and C&I



# Questions?

