Agape Water Solutions, Inc.

• A Pennsylvania Corporation
• High purity water systems
  – Custom Engineering
  – Manufacturing
  – Service
  – Worldwide
• Business model predicated on providing the best combination of components to achieve the greatest value for our customers
PRODUCT OFFERING

• System Design
  – Solidworks 3D Mechanical
  – Autocad 2D Electrical

• Manufacturing
  – UL Approved Panel Shop
  – ASME BPE Welding
    • Orbital Welding
    • Manual Welding
  – GF & Asahi Certified Welding
    • IR Welding

• Service
  – Start up
  – Maintenance
Introduction to RO-EDI

1950’s:
- Pretreatment → Cation-Anion → Mixed Bed → Ultrapure Water

1980’s:
- Pretreatment → Reverse Osmosis → Mixed Bed → Ultrapure Water

Late 1990’s:
- Pretreatment → R.O. → EDI → Ultrapure Water
RO Systems

- Typical RO System operate at 50 to 75% recovery
- 25 to 50% Waste Water
- Special Designs can reduce recovery to 90% or higher
EDI Systems

- Typical EDI Systems operate at 90 to 95% maximum recovery
- 5 to 10% Minimum Waste Water
- Special Designs can reduce recovery to 99%
EDI Concentrate Recovery

- RO Salt Reject typically 95-99%
- EDI concentrate 10-20x RO permeate TDS (10-100% Feed TDS)
- EDI can be recovered to RO inlet via vented raw water storage tank
- Effectively 100% EDI recovery

*Not including cleaning requirements
Conclusions

• AGAPE WATER SOLUTIONS INC. PROVIDES SPECIFIC TECHNICAL SOLUTIONS TO OUR CUSTOMERS.

• REVERSE OSMOSIS AND ELECTRODEIONIZATION ARE EFFECTIVE CHEMICAL FREE TECHNOLOGIES.

• SPECIAL DESIGNS CAN REDUCE WASTE WATER TO 10% OR LOWER