



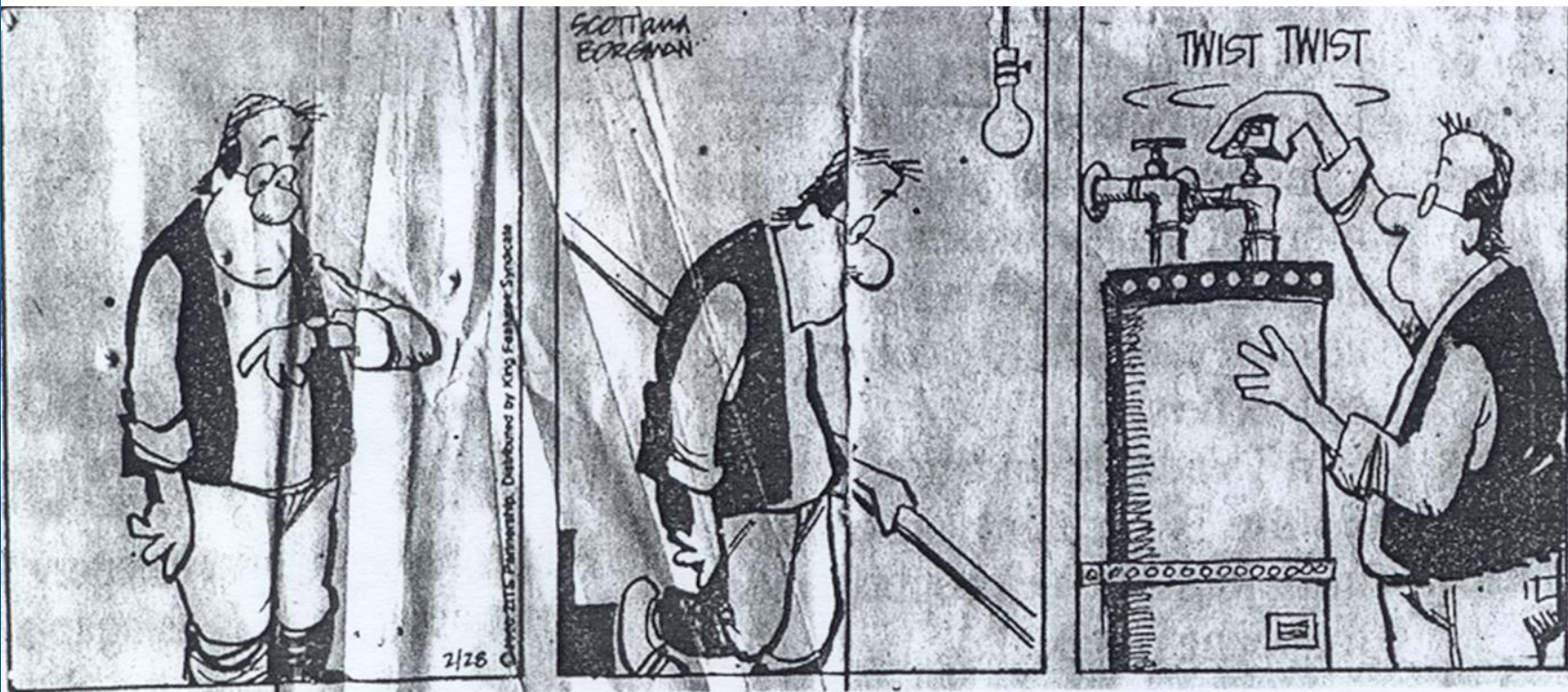
**Cedar Falls Utilities**  
THE POWER OF SERVICE

# Agenda

- **CFU Background – General/Energy Efficiency**
- **Why – Sizing of Equipment**
- **Experiences**
- **Lessons**
- **Partnership**
  
- ***Questions!***



# Energy Efficiency





IT HAPPENED AGAIN!  
TWENTY MINUTES IN THE  
SHOWER, AND **BAM!**  
THE HOT WATER  
JUST STOPS!

I'LL HAVE  
IT LOOKED  
AT.



# About CFU

## Serves Cedar Falls, Iowa and surrounding areas:

- Water - 1888 10,000 customers
- Electric - 1913 17,000 + customers
- Natural Gas - 1928 12,000 + customers
- Communications – 1994

Energy Efficiency program for customers since 1970s



## Residential Incentive Programs

- Appliance recycling
- Water heater
- **Heating & Cooling Equipment**
- Retrofit & New construction Insulation
- Lighting – *Change a Light/Be Bright*
- **Duct Modifications**
  - *Started 2014*

## Other - Programs/Services

- Blower Door
- Thermal Camera
- Duct Blaster
- Flow Hood
- **Energy Code Compliance & Inspections**



# Why - Equipment Sizing

## CFU Side

- **Reduce demand** (Mw/Kw)
  - Set peak in 2012 - has stayed flat since

## Experiences

### Customer

- Some frustration
- Take the time to educate
- Incentives Drives
  - Existing
    - Equipment Sizing required – 1998 (9,990 completed)
    - SAVE testing/reporting - 2014
  - New Home program
    - Good Cents
    - 5 star Home



# Experiences Continued

## Contractor

- Slow to grasp and accept
- All “points” dug in
- Incentive
- Gave them a *Parachute*
- Need follow-up training





# Why “SAVE”

## CFU side

- Moving to the next level
- Improve capacity limitations
- Leveraging other utilities

## Customer side

- Ensure quality install
- Customer Comfort concerns – cold & hot rooms
- Get the most out of customer/CFU investment!



# Lessons & Experiences

## Contractor

- **Must go slow – have different thought process**
- **Want to install the “box” and move on**
- **Great diagnostic tool**
- **Don’t understand value/importance**
- **Software understanding**

## Customer

- **Some frustration**
  - Incentives Drives

## Case Studies

- **Willing participants in the wings**



## Pilot #1 - Ranch home

### Pre – Modification

Total ESP - .93

Kitchen - 78 CFM

Family Rm – 73 CFM

BR #1 – 65 CFM

BR #2 – 83 CFM

MS BR #1 – 78 CFM

MS BR #2 – 52 CFM

### Post – Modification

Total ESP - .75 **20%** ↓

Kitchen – 121 CFM - **11%**↑

Family Rm – 81 CFM - **11%**↑

BR #1 – 71 CFM - **9%**↑

BR #2 – 108 CFM - **30%**↑

MS BR #1 – 87 CFM - **11%**↑

MS BR #2 – 84 CFM - **61%**↑

## Pilot #2 - 2 Story home

### Pre – Modification

Total ESP - .74

BR #4 - 34 CFM

MS Bath – 28 CFM

BR #2 – 60 CFM

BR #3 – 34 CFM

MS BR #1 – 41 CFM

### Post – Modification

Total ESP - .59 **20%** ↓

BR #4 – 78 CFM - **129%**↑

MS Bath – 52 CFM - **168%**↑

BR #2 – 99 CFM - **65%**↑

BR #3 – 68 CFM - **100%**↑

MS BR #1 – 90 CFM - **120%**↑



# Lessons

- **Train staff – *in-house expert***
- **Involve contractors**
  - Periodic meetings with them
  - Make staff available for questions/site visits
- **Rolled SAVE out over multiple years**
  - CFU hosted first SAVE training in 2010
- **Adjust program to keep participation high**
  - Increased incentives essential
  - In years 1-2 of program, you will probably have some decrease in participation
  - Find your “*Champions*” and “*use*” them.



# Partnership – City of Cedar Falls

- **New construction** - Plan review –
  - Residential
  - Commercial
- **Insulation inspections**

*Questions / Comments?*





