

# Green Button Initiative success story, built on NAESB standards foundation

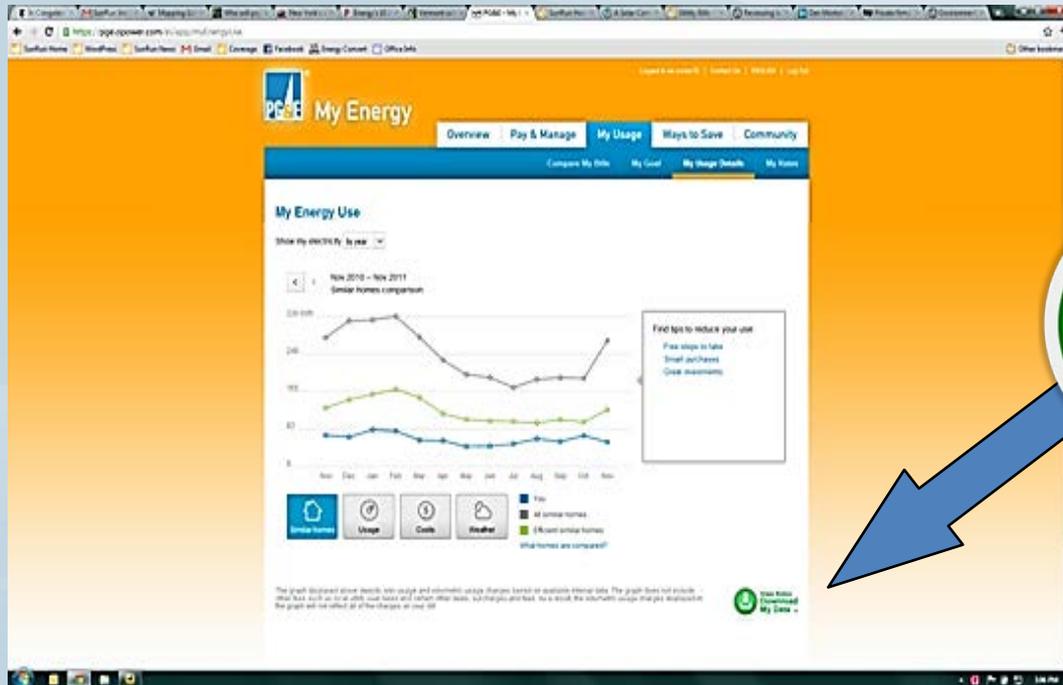
ICSP-GMF Meeting  
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## Dr. David Wollman

Deputy Director, Smart Grid and Cyber-Physical Systems Program Office  
Manager, Smart Grid Standards and Research  
Engineering Laboratory  
National Institute of Standards and Technology (NIST)  
U.S. Department of Commerce

# Green Button Initiative

- *Common-sense idea that electricity customers should be able to download their own energy usage information in a consumer- and computer-friendly electronic format from their utility's secure website*
- *Result of collaboration among White House, DOE, NIST, state regulators, utilities, vendors, SGIP, and North American Energy Standards Board*



**15+ million consumers have access to Green Button data NOW, and 36+ million will by 2013**



**Green Button  
Download  
My Data**

[www.greenbuttondata.org](http://www.greenbuttondata.org) &  
[www.nist.gov/smartgrid/greenbutton.cfm](http://www.nist.gov/smartgrid/greenbutton.cfm)



# Green Button Initiative

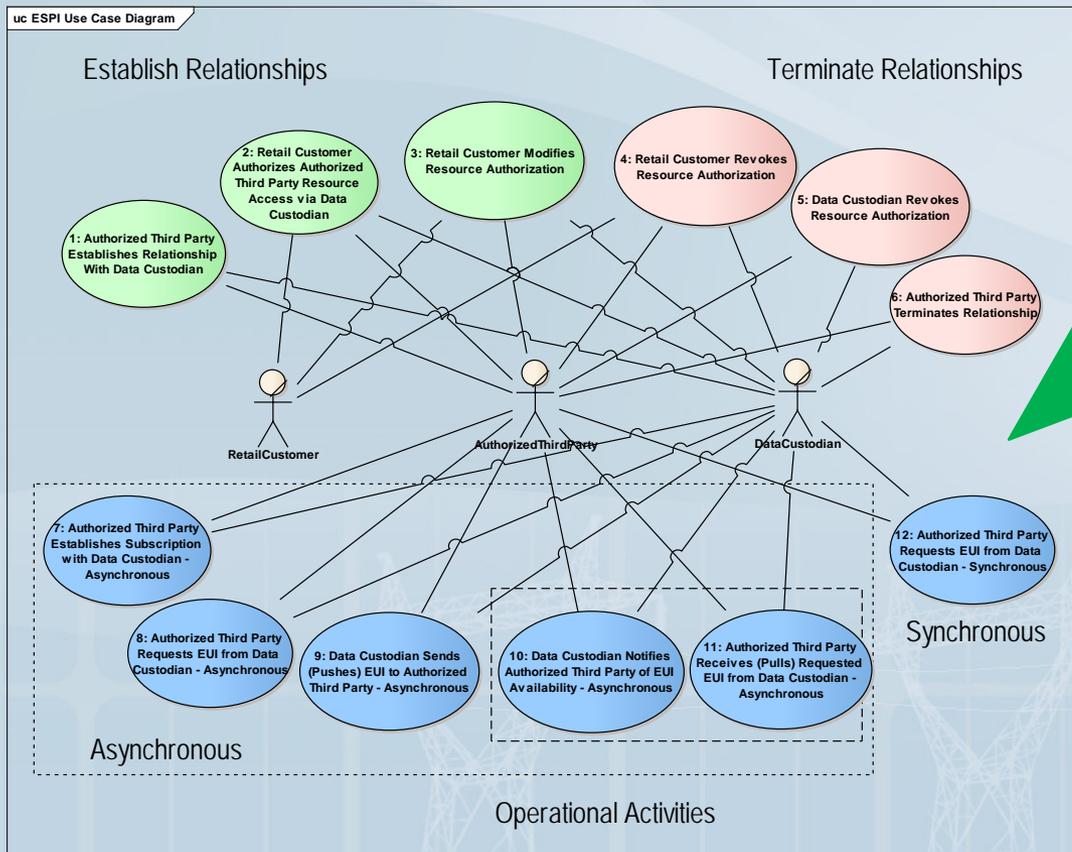


- Green Button is
  - A policy
    - White House call-to-action and initiative
    - Inspired by Blue Button concept – medical information
  - A brand
    - Green Button logo implies specific capabilities
    - Interoperability standards and testing and certification are being developed to ensure expectations are met
  - A set of technologies and associated standards
    - Green Button Download My Data (NAESB ESPI xml data file)
    - Green Button Connect My Data (NAESB ESPI automated exchange)



# Green Button Connect My Data

- The ability to authorize a third party to automatically retrieve a customer's energy usage information from a utility via Web Services, based on the full NAESB Energy Services Provider Interface (ESPI) REQ-21 standard. The data xml file structure "payload" is based on NAESB ESPI/Energy Usage Information REQ-18/WEQ-19 standard.



Green Button  
Connect  
My Data

The NIST Smart Grid Interoperability Panel Priority Action Plan PAP20 is coordinating Green Button standards revisions and testing/certification





# NIST Smart Grid Interoperability Panel

- Public-private partnership created in Nov. 2009
- 780+ member organizations, 1900+ participants
- Open, public process with international participation
- Coordinates standards development
  - Identifies Requirements
  - Prioritizes standards development programs
  - Works with over 20 SDOs including IEC, ISO, ITU, IEEE, ...
  - Significant international participation
- Web-based participation



SGIP Twiki:

<http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/SGIP>



# Green Button Initiative: an overnight success ... years in the making

- OpenADE (Open Automated Data Exchange)
  - Early requirements effort for securely sharing energy information with third parties
- NIST SGIP Priority Action Plan 10 (and 20)
  - Accelerates issue resolution and consensus development
- OpenADE / SGIP inputs to NAESB REQ21
  - Energy Services Provider Interface (ESPI)
  - Privacy: REQ22 Third Party Access to Smart-Meter-based Information
- Flexible file format basis for Green Button
  - Implementation agreements to use a subset of ESPI and energy usage information.
  - Green Button Download My Data and Green Button Connect My Data



# Recent news – plus contact info

- White House Energy Datapalooza – Oct 1, 2012
  - Hosted by Todd Park, US CTO
  - New utility and vendor Green Button commitments
  - Recognition for DOE Apps for Energy contest winners
  - Showcase event for entrepreneurs solving goals identified at Energy Data Jam events
- GridWeek conference – Green Button Initiative received “Smart Policy” award – Oct 4, 2012
- Contact info: david.wollman@nist.gov  
301-975-2433

