

System Evolution & Legacy Integration: Energy Services Provider Interface (ESPI) David Mollerstuen Tendril <u>dmollerstuen@tendrilinc.com</u> <u>www.tendrilinc.com</u>



#### Grid-Interop 2011



- Protocol, data model, and best practices to securely deliver a consumer's Energy Usage Information to a 3<sup>rd</sup> Party, under consumer direction and for the consumer's benefit
- NAESB REQ.21, completed October 18 2011
- Intended to satisfy the assumptions and requirements laid out in OpenADE
- Built on NAESB REQ.18 WEQ.19, PAP10 Energy
  Usage Information



# **ESPI Services Diagram**





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## **ESPI** Actors Overview



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### **ESPI Use Cases**

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# **ESPI Sample Application**



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 Testing and Certfication activity occurring in OpenADE

http://osgug.ucaiug.org/sgsystems/OpenADE/default.aspx

 Sample implementation activity occurring via OpenESPI

http://www.openespi.org/

• DOE Funding Opportunity Announcement

http://www.grants.gov/search/search.do?mode=VIEW&oppId=130273



# Thank You!

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- Q. How does a standards-based interface such as ESPI simplify legacy integration for Utilities?
- Prior to ESPI, usage information integrations were "m x n"; ESPI allows implementation to a single, common interface.
- 2. Existing vendors (e.g. MDMS vendors) will trend towards making ESPI interface a standard offering in their products



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- Q. There's been a lot of talk about "Green Button" here at Grid-Interop -- what's the relationship between Green Button and ESPI, and how does that relate to legacy integration?
- Green Button data format is based on ESPI
- Green Button is "snapshot" of Energy Usage Information delivered directly to the consumer. ESPI facilitates delivery (historical and ongoing) of Energy Usage Information to a 3<sup>rd</sup> Party
- By implementing Green Button, Data Providers begin the process of dynamic delivery of Energy Usage Information to consumer – initial steps towards full ESPI support.
- Incidentally, assist in the development of compelling, valuable applications built on Energy Usage Information