

# The Integrated Energy and Communication Systems Architecture

## Volume II: Functional Requirements

### *Appendix B: Stakeholders Engaged and Documents Reviewed*

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## Appendix B – Stakeholders Engaged and Documents Reviewed

This appendix contains a summary of the stakeholder engagements that were used to gather input to the design of IECSA. It should be noted, that the first table shows the “traditional” stakeholder venue where a meeting with individuals was convened and discussions and presentations were exchanged. The latter part of this appendix contains a list of the key stakeholder documents that were consulted as part of the stakeholder engagement process.

### Stakeholders Engaged

Date/Type of Engagement	Name	Domains and Functions Addressed	Stakeholder Category	Summary of Results	Status of Results
ANSI C12 SC17 Meeting January 31, 2003 Presentation by Marty Burns	Meter Vendors and Utilities working on meter standards	Various domains and functions	Standards Bodies and industry Groups	Provided overview of IECSA project. Solicited input from audience. Engaged in general one-on-one discussions with meeting attendees.	Utilized as general background information for multiple use cases.
ASHRAE SPC134 Meeting January 31, 2003 Presentation by Marty Burns	Building Controls and Automation Industry members	Various domains and functions	Standards Bodies Industry Groups	Provided overview of IECSA project. Solicited input from audience. Engaged in general one-on-one discussions with meeting attendees.	Utilized as general background information for multiple use cases.
United Telecom Council Regional Meeting February 10, 2003 Presentation by Mark Adamiak	Telecommunications Industry	Various domains and functions	Utilities Industry Groups	Provided overview of IECSA project. Solicited input from audience. Engaged in general one-on-one discussions with meeting attendees.	Utilized as general background information for multiple use cases.
DER/ADA Stakeholder Meeting March 3-4, 2003 Participation by Frances Cleveland	Small Generation Vendors, System Integrators, Utility Engineers	DER-ADA	Utilities Government Institutions Industry Groups Vendors & Suppliers	Met with a number of distribution and transmission utilities, DER vendors, DER integrators, communications vendors, and consultants - Discussed DER and Distribution Automation, to determine most important DER devices and how they were used (planned to be used) in distribution systems. These eventually led to a list of Use Cases that were incorporated in the IECSA enterprise activities.	Individual and collective follow-ups are progressing
CEIDS DER Meeting March 17-18, 2003 Presentations by Mark Adamiak and Frances Cleveland	Small Generation Vendors, System Integrators, Utility Engineers	DER-ADA	Utilities Government Institutions Industry Groups Vendors & Suppliers	Provided overview of IECSA project. Solicited input from audience. Engaged in general one-on-one discussions with meeting attendees.	Utilized as general background information for multiple use cases.

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DER/ADA Object Modeling Workshop April 29-30, 2003 Presentation by Frances Cleveland	Small Generation Vendors, System Integrators, Utility Engineers	DER-ADA	Utilities Government Institutions Industry Groups Vendors & Suppliers	Met with a number of distribution and transmission utilities, DER vendors, DER integrators, communications vendors, and consultants - Organized and clarified the DER Use Cases from March meeting. Discussed communication requirements, including performance, for interactions with DER devices and systems. Focused mostly on the reasons for object models, the existing IEC61850 object models for substation devices, and the plans for developing DER object models.	Utilized as general background information for multiple use cases.
UCA User's Group April 29-30, 2003 Presentation by Frances Cleveland	International Utilities, Major Vendor Representatives, Utilities, Consultants	DER-ADA WAMAC Consumer/R TP	Utilities Vendors & Suppliers Standards Bodies	Provided overview of IECSCA project. Solicited input from audience. Engaged in general one-on-one discussions with meeting attendees.	Utilized as general background information for multiple use cases.
EPRI PQA North America June 2-4, 2003 Presentation by Erich Gunther	Vendors and Power Quality Engineers and Consultants	Consumer/R TP	Utilities Vendors & Suppliers End Use Groups	Brief 3 slide presentation on IECSCA project	Utilized as general background information for multiple use cases.
GE North American Executive Advisory Council June 24, 2003 Presentation by Peter Sanza and Mark Adamiak	Utility Executives	Various domains and functions	Utilities Vendors	Provided overview of IECSCA project to GE and utility executives. Solicited input from audience. Engaged in general one-on-one discussions with meeting attendees.	Utilized as general background information for multiple use cases.
IEEE Power Engineering Society Power Systems Coordinating Committee July 15-17, 2003 Presentation by Frances Cleveland	Vendors, Utilities, Consultants, Communications and Power Engineers	DER-ADA WAMAC Consumer/R TP	Utilities Standards Bodies Industry Groups Vendors & Suppliers	Presented IECSCA concepts to communication experts, with discussions on communication protocol requirements and object modeling requirements	Utilized as general background information for multiple use cases.
Sep 8-10, 2003 IEEE T&D Show Presentation and meetings by/with Erich Gunther, Mark Adamiak, and Jeff Lamoree	General Audience, multiple individuals	Multiple domains and functions	Utilities Standards Bodies Industry Groups Vendors & Suppliers	Provided overview of IECSCA project. Solicited input from audience. Engaged in general one-on-one discussions with meeting attendees.	Utilized as general background information for multiple use cases.

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CEIDS DER/ADA Stakeholder Meeting Sept. 15-17, 2003 Participation by Frances Cleveland, Nokhum Markushevich, and Erich Gunther	DER/ADA Project team members	Distributed Resources – object modeling, device interactions	Utilities Government Institutions Industry Groups Vendors & Suppliers	Gathered detailed information for DR device object models and communication requirements. Draft document available as input	Needs to be converted into a use cases
Electric Association of Pennsylvania Regional Meeting Sept. 18, 2003 Presentation by Mark Adamiak	Various individuals	Multiple domains and functions	Utilities Industry Groups Vendors & Suppliers End User Groups	Provided overview of IECSA project. Solicited input from audience.	Utilized as general background information for multiple use cases.
Sep 22-26, 2003 IEEE PSRC and UCA UG Presentation and in person interviews by/with Erich Gunther, Mark Adamiak and Frances Cleveland	General Audience, multiple individuals	Multiple domains and functions	Utilities Government Institutions Industry Groups Vendors & Suppliers Standards Bodies	Provided overview of IECSA project. Solicited input from audience. Engaged in general one-on-one discussions with meeting attendees.	Utilized as general background information for multiple use cases.
IEEE/Cigré Meeting Oct 7- 10, 2003 Presentation by Marek Samotyj	General Audience	CEIDS and IECSA Vision	Utilities Industry Groups Vendors & Suppliers International Representatives	Provided overview of IECSA project. Solicited input from audience.	Respond to submitted comments on Twiki and by e- mail.
IEC TC57 Plenary, SPAG, and WG meetings Oct. 13-16	Various individuals	DER-ADA WAMAC Consumer/R TP	Utilities Industry Groups Vendors & Suppliers International Representatives Standards Bodies	Frances Cleveland led a review of IEC TC57 Reference Architecture, and the harmonization of IEC61850 object modeling with the CIM information modeling. Discussions of what an architecture is or needs to include. IEC TC57 Reference Architecture was changed to reflect more comprehensive and more object-oriented approaches, including the concepts used by ebXML for metamodels of information. The IEC TC57 experts are highly critical stakeholders for input to and review of the IECSA architecture	Individual and collective follow-ups are progressing
Oct 20-21, 2003 EPRI PQ Interest Group Presentation by Erich Gunther	General Audience	IECSA Overview	Utilities	Provided overview of IECSA project. Solicited input from audience.	Respond to submitted comments on Twiki and by e- mail.

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DOE Project Review Meeting – Oct. 27, 2003 In person interview with Erich Gunther	Ron Hofmann California Energy Commission	Consumer – demand response	Government Institutions	Obtained list of demand response functions, concerns, and priorities. Obtained documents from which to derive use cases	Needs to be converted into use cases.
DOE Project Review Meeting – Oct. 27, 2003 In person interview with Erich Gunther	Bob Yinger Southern California Edison	Consumer - RTP	Utilities	Obtained general background of SCE RTP activities. Identified SCE staff for follow up.	Information processed into RTP uses cases and published on SharePoint. Follow up required to refine and add additional use cases.
DOE Project Review Meeting – Oct. 27, 2003 In person interview with Erich Gunther	Mark Rawson California Energy Commission	Consumer and Distributed Resources	Government Institutions	Obtained list of distributed resource functions important in California. Obtained documents from which to derive use cases.	Needs to be converted into use cases
Oct. 30, 2003 meeting with Jim Bobyn	Daniel Major Hydro Quebec	WAMAC Contingency Analysis Baseline	Utilities	Briefly explained the IECSA project, and obtained clarification of: <ul style="list-style-type: none"> <li>Off-line and on-line usage of Contingency Analysis</li> <li>Process and data flow</li> <li>Data from/to other systems</li> <li>Users</li> <li>Functionality</li> <li>Set-up and initialization procedures</li> <li>User documentation and tools</li> </ul>	Plan future meeting to <ul style="list-style-type: none"> <li>Explain the IECSA project and the value story to management</li> <li>Solicit participation in the project as an active "stakeholder"</li> <li>Validation of current usage, process and data flow, communications methods, limitations</li> <li>Discuss "wish list" for a more capable CA, and future communications requirements</li> </ul>
Powersystems World Nov. 5, 2003 In person interview with Erich Gunther	Jane Thornton IBM	Consumer – power quality, general	Vendors & Suppliers End User Groups	General interview. Provided overview of IECSA project. Laid groundwork for future contact for possible use cases.	Need to review documents obtained from Jane, identify potential use cases, and follow up.
Powersystems World Nov. 5, 2003 In person interview with Erich Gunther	Bob Jones Federal Aviation Administration	Consumer – demand response, power quality, asset management	Government Institutions End User Groups	Provided overview of IECSA project. Obtained input for power monitoring and power quality use cases.	Information fed into power quality use case and published on SharePoint. Will use information for other use cases not yet complete.
Powersystems World Nov. 6, 2003 In person interview with Erich Gunther	Ray Mohan Northrop Grumman	Consumer – asset management	End User Groups	Identified requirements necessary for management of UPS and stand-by generation plant.	Needs to be converted into use cases.
Powersystems World Nov. 6, 2003 In person interview with Erich Gunther	Richard Stetler Power Measurement	Consumer – power metering, power quality	Vendors & Suppliers	Provided overview of IECSA project. Obtained input for power monitoring and power quality use cases.	Information fed into power quality use case and published on SharePoint. Will use information for other use cases not yet complete.
Powersystems World Nov. 6, 2003 In person interview with Erich Gunther	Jerry Olechiv Drantz-BMI	Consumer – power metering, power quality, DR aggregation	Vendors & Suppliers	Provided overview of IECSA project. Obtained input for power monitoring and power quality use cases.	Information fed into power quality use case and published on SharePoint. Will use information for other use cases not yet complete.

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Powersystems World Nov. 6, 2003 Paper presentation by Erich Gunther	Power Engineers, System Integrators	IECSA Overview	Utilities Vendors & Suppliers End Use Groups	Provided overview of IECSA project. Solicited input from audience.	Respond to submitted comments on Twiki and by e-mail.
Meeting on Nov. 6, 2003 with Mark Adamiak	Dan Nordell Xcel Energy	WAMAC ADA-DER	Utilities	Discussed concept of "auto-sourcing" distribution feeder	Need to follow up with domain template
Nov. 7 and Nov. 26, 2003 meetings with Jim Bobyn	Andrew Yuen and Jeff Penrice Hydro One Networks ("wires" portion of Ontario Hydro)	WAMAC Contingency Analysis Baseline Contingency Analysis Future	Utilities	<p>Provided overview of IECSA project and value story (sales pitch)</p> <p>Obtained "OK to proceed" with minimal interruption, and limited access to a CA expert</p> <p>Received functional overview and demonstration of the on-line use of CA for operations support</p> <p>Reviewed questions and issues from the first meeting</p> <p>Clarified current CA on-line usage with a more detailed demonstration and hands-on exposure</p> <p>Obtained screen copies for better understanding of functionality and user interface</p>	<p>Need to conduct future meetings to:</p> <ul style="list-style-type: none"> <li>Review the CA template and summarize the project progress (i.e. show deliverables)</li> <li>Solicit continued participation in the project as an active "stakeholder"</li> <li>Validate current usage, process and data flow, communications methods, limitations</li> <li>Discuss "wish list" for a more capable CA, and future communications requirements</li> </ul>
GE Power Systems Conference in Brazil, Nov. 10, presentation by Mark Adamiak	Various individuals	WAMAC	Utilities End Use Groups International Representatives	Provided overview of IECSA project. Solicited input from audience. Engaged in general one-on-one discussions with meeting attendees	Utilized as general background information for multiple use cases.
Meeting Nov. 12, with Mark Adamiak in Brazil	George Kotlarewski Furnas	WAMAC	International Representatives Utilities	Discussion of IECSA and possible template on use of TCSC for inter-oscillation damping	Need follow up engagement via e-mail
Meeting Nov. 12, with Mark Adamiak in Brazil	Meeting with Rio Light	WAMAC	International Representatives Utilities	Discussed IECSA identification of "legacy" interface issue	Need follow up engagement via e-mail
Nov 12-14,2003 IEEE 1547 meeting In person interview with Erich Gunther	Joe Kerecman PJM Interconnection	Transmission operations – general interview	RTOs/ISOs	Provided overview of IECSA. Discussed broad requirements for IECSA. Invited to meet with PJM in 2004 for full engagement.	Schedule meeting with PJM
Nov 12-14,2003 IEEE 1547.3 meeting In person interview with Erich Gunther	Steve Batsell ORNL	Federated Services - Network security	Government Institutions	Provided overview of IECSA. Discussed broad security requirements for IECSA.	Needs to be converted into a use case. Schedule in person follow-up meeting.
Nov 12-14, 2003 IEEE 1547.3 Meeting, group interaction, in person interviews by Erich Gunther	Members of WG	Distributed Resources – general communications requirements , object models, security	Standards Bodies Utilities	Gathered detailed information for DR device object models and communication requirements. Draft document available as input.	Needs to be converted into a use cases.

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IEC TC 88 PT 25 Meeting Nov. 18, 2003 In person interview with Erich Gunther	Sandy Butterfield NREL – Wind Program And other wind industry experts	Transmission Connected Generation – wind power plant communications	Government Institution Vendors & Suppliers Utilities International Representative Standards Bodies	Provided overview of IECSCA. Obtained requirements for wind turbine and wind power plant communications. Obtained document from which to derive use cases.	Needs to be converted into a use case.
Dec 2-3, 2003, in person discussions, presentation by Erich Gunther	Members of IEC TC 57 WG 10 PQTF	Consumer – power quality metering object models and requirements	Government Institution Vendors & Suppliers Utilities International Representative Standards Bodies	Gathered detailed information for PQ monitor object models and communication requirements. Draft document available as input.	Needs to be converted into a use case.
Meeting Dec. 8, with Peter Sanza	Engagement with Northeast Utilities	WAMAC	Utilities	Made presentation on IECSCA, identified areas for further collaboration	Need to follow up with domain template or more specialized discussion with identified individuals
Meeting December 9 and 11 with Mark Adamiak	Bruce Fardarnash New York Power Authority	WAMAC	Utilities	Meeting and discussion resulting in definition of Voltage Control Cone	Need to follow up with domain template or more specialized discussion
Phone interview Dec. 15 with Jack King	Donna Pratt Neenan Associates	Consumer - RTP	Vendors & Suppliers Market Participants	Obtained requirements and insight into RTP process. Determined that RTP industry is concentrating on demand response issues.	Information processed into RTP use cases and published on SharePoint. Follow up required to refine and add additional use cases.
Powersystems World 2003/meeting at BGE on 12/16/03 In person interview with Erich Gunther and Marty Burns	Vladimir Basch Baltimore Gas & Electric	Distribution Operations – capacitor bank control, outage management Federated services – network management.	Utilities	Provided overview of IECSCA project. Obtained input for several use cases.	Needs to be converted into use cases.
IEEE PSRC Jan. 12-14, 2004 Tampa	Various individuals	Various domains and functions	Utilities Vendors & Suppliers Standards Bodies	Erich Gunther and Mark Adamiak presented on IECSCA and conduct stakeholder engagements	Engagement completed
UCA International Users Group Jan. 15-16, 2004 Tampa	Various individuals	Various domains and functions	Utilities Vendors & Suppliers Standards Bodies	UCA UG meeting – IECSCA presentation & stakeholder engagement by Mark Adamiak, Frances Cleveland, and Erich Gunther	Engagement completed
Areva (Alstom) In person meeting with Mark Adamiak Jan. 16, 2004	Alex Apostolov	WAMAC	Vendors & Suppliers	Discussed optimal load shed	Mark to follow up

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Distributech, Jan. 20-22, 2004 Orlando	Various Utility, vendor and industry	Various domains and functions	Utilities Vendors & Suppliers Government Institutions Industry Groups	Erich Gunther spoke at conference and helped teach Utility University. John Gillerman helped teach Utility University. Sandy Smith, Mark Adamiak, and others attended. Opportunities for stakeholder engagement and outreach to industry press.	Engagement completed
Distributech Jan. 20-22, 2004 Orlando	Larry Mansueti US Department of Energy Office of Electric Transmission & Distribution	Consumer-RTP Demand Response, Consumer Load Control, Real Time Pricing	Government Institution	Sandy Smith spoke with him after a presentation on demand response. Sandy briefly described IECSA and provided a link to the web site.	Sandy followed up with an e-mail about obtaining more information on GridWise (which Larry Mansueti is coordinating) as well as an IEA project on DR
Distributech Jan. 20-22, 2004 Orlando	Brian White Gulf Power	Consumer-RTP Demand Response, Consumer Load Control	Utility	Sandy Smith spoke with him after a presentation on Gulf Power's DR program. Sandy briefly described IECSA and requested more info on comm. requirements.	Sandy followed up with an eye towards developing a DR use case
Distributech Jan. 20-22, 2004 Orlando	Ed Malemezian Consultant previously with Florida Power & Light	Consumer-RTP Demand Response, Consumer Load Control, Real Time Pricing	Utility	Sandy Smith spoke with him after a presentation on FP&L's real-time DR program. Sandy briefly described IECSA and requested more info on comm. requirements.	Sandy followed up with an interview to develop a use case on DR and load control
Distributech Jan. 20-22, 2004 Orlando	Robert Burke New England ISO	Consumer-RTP Demand Response, Consumer Load Control, Real Time Pricing	RTOs/ISOs	Sandy Smith spoke with him during a conference session. Sandy briefly described IECSA	Sandy tried to follow up with an eye towards getting information on communications requirements for demand response
Distributech Jan. 21 2004 Orlando	Dick Preston Comverge	Consumer-RTP Demand Response, Consumer Load Control	Vendor & Supplier	Sandy Smith spoke with him during a conference session. Sandy briefly described IECSA	Sandy tried to follow up with an eye towards getting information on communications requirements for demand response
Distributech Jan. 20-22, 2004 Orlando	Ross Malme RETX	Consumer - RTP Demand Response, Consumer Load Control	Vendor & Supplier	Sandy Smith spoke with him during a conference session. Sandy briefly described IECSA	Sandy followed up with an e-mail about obtaining more information on an IEA project on DR
IEEE PES PSCC Meeting Jan. 21, 2004 Orlando	Individuals from TVA, Arizona Public Service, University UK	Security DER-ADA	Standards Bodies Utilities	Frances Cleveland working with them on commencement of P1649 Technical Report on Security Assessments for Utilities	Initial contact, but interest in project indicated
IEEE Power Quality Subcommittee Jan. 22-23, 2004 Orlando	Various individuals	Consumer-RTP power quality metering object models and requirements	Utilities Vendors & Suppliers Standards Bodies	IEEE PQ related task forces and working groups meet. Erich Gunther made an IECSA presentation and undertook stakeholder engagements.	Some contacts made and follow ups planned

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Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	John Allemong, American Electric Power	WAMAC	Utilities	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Navin Bhatt, American Electric Power	WAMAC	Utilities	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Dan Boezio American Electric Power	WAMAC	Utilities	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Paul Barber CERTS	WAMAC	Government Institutions	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Vikram Budhraj CERTS	WAMAC	Government Institutions	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Matt Donnelly CERTS	WAMAC	Government Institutions	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Jim Dyer CERTS	WAMAC	Government Institutions	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Ross Guttromson CERTS	WAMAC	Government Institutions	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Sakis Meliopoulos CERTS	WAMAC	Government Institutions	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Phil Overhold CERTS	WAMAC	Government Institutions	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up

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Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Floyd Galvan Entergy	WAMAC	Utilities	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Don Minnis FPL	WAMAC	Utilities	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Bogdan Kasztenny GE	WAMAC	Vendors & Suppliers	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	William Premerlani GE	WAMAC	Vendors & Suppliers	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Eric Huffine Midwest ISO	WAMAC	RTOs/ISOs	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Dale Osborn Midwest ISO	WAMAC	RTOs/ISOs	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Bill Phillips Midwest ISO	WAMAC	RTOs/ISOs	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Bob Cummings NERC	WAMAC	Regulator Industry Groups	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Brian Nolan NERC	WAMAC	Regulator Industry Groups	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Tom Vandervort NERC	WAMAC	Regulator Industry Groups	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up

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Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Joe Chow New York ISO	WAMAC	RTOs/ISOs	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Jon Ponder PJM	WAMAC	RTOs/ISOs	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	George Alexander Schweitzer Engineering Laboratories	WAMAC	Vendors & Suppliers	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Susan Fagan Schweitzer Engineering Laboratories	WAMAC	Vendors & Suppliers	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Armando Guzman Schweitzer Engineering Laboratories	WAMAC	Vendors & Suppliers	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	David Marshall Southern Company	WAMAC	Utilities	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	James Viikinsalo Southern Company	WAMAC	Utilities	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Mike Ingram TVA	WAMAC	Utilities	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Meeting on Eastern Interconnect Phasor Project Jan. 22, 2004 Washington, DC	Wai-Ran TVA	WAMAC	Utilities	Mark Adamiak and Peter Sanza presented on IECSA	Need to follow up
Group Engagement with BPA Feb. 4, 2004 Vancouver, WA	Ken Martin Carson Taylor Mike Hoffman Jim Tillet	WAMAC Consumer/R TP	Utilities	Mark Adamiak coordinated Discussed power business, demand response, direct load control, customer response.	Needs to be converted into use cases.

<b>Date/Type of Engagement</b>	<b>Name</b>	<b>Domains and Functions Addressed</b>	<b>Stakeholder Category</b>	<b>Summary of Results</b>	<b>Status of Results</b>
Group Engagement with Pacific Northwest National Laboratory Feb. 5, 2004 Richmond, WA	Researchers	WAMAC	Government Institutions	Mark Adamiak coordinated. Discussed direct load control	Needs to be converted into use cases.
Group Engagement with PG&E Feb. 6, 2004 San Francisco and Oakland, CA	Utility Engineers	WAMAC DER-ADA Consumer/R TP	Utilities	Mark Adamiak coordinated. Discussed communication requirements for the three cone areas	Needs to be converted into use cases.
Group Engagement with Electricite de France Feb. 16-17, 2004 Near Paris	Andre Maizener Eric Lanbert	WAMAC Consumer/R TP	Utilities	John Gillerman discussed transmission-related E Commerce	Input will be used to refine existing use cases and help with the formulation of new ones
Group Engagement with Electricite de France Feb. 16-17, 2004 Near Paris	Andre Maizener Eric Lambert Jean-Claude Gauthier Xavier Mamo Sylvie Mallet Olivier Huet Arnaud Valenti Michael Boll Frederic Gorgette Floriane Fesquet Pascale Michalak Juliette LeDelliou Anne Picault Aline Pajot Henry Boccon-Gibod Joseph Maire	WAMAC DER-ADA Consumer/R PT	Utilities	Engagement with Erich Gunther, Mark Adamiak, Frances Cleveland, Walt Dixon, Marty Burns, and others. Presented findings so far and discussed communication requirements for the three cone areas.	Input will be used to refine existing use cases and serve as foundation for new ones.
Group Engagement with Polish Power Grid Feb. 19-20, 2004 Warsaw	Utility Engineers	WAMAC DER-ADA Consumer/R PT	Utilities	Engagement with Erich Gunther, Mark Adamiak, Frances Cleveland, Walt Dixon, and others. Presented findings so far and discussed communication requirements for the three cone areas.	Input will be used to refine existing use cases and serve as foundation for new ones.
Meeting March 10, 2004 with Jeff Lamoree	Charlie Smith Nexgen Energy	Consumer/R TP	Vendors & Suppliers Market Participants	Obtained requirements and insight into aggregation of DG to participate in DR programs and open energy markets.	Information processed into use case and published on SharePoint.
Clemson Power Systems Conference March 10-12, 2004 Clemson, SC	Utility Engineers Academics Industry Representatives	DER-ADA Consumer/R TP	Utilities Government Institutions	Erich Gunther and Mark Adamiak spoke and held individual engagements	Engagement completed, some follow up required.
Frances Cleveland meetings with LIPA	George Ello	DER	Utilities	Ongoing phone and e-mail exchanges on DER issues.	Ongoing.

<b>Date/Type of Engagement</b>	<b>Name</b>	<b>Domains and Functions Addressed</b>	<b>Stakeholder Category</b>	<b>Summary of Results</b>	<b>Status of Results</b>
We Energies April 6-8, 2004 Milwaukee, WI	Graham Siegel Other Utility Engineers	WAMAC Distribution Consumer	Utilities Vendors Customers	Frances Cleveland conducted three day stakeholder workshop	Engagement completed, input will be used to refine existing use cases and serve as foundation for new ones.
NERC Data Exchange Working Group Meeting April 15-16, 2004 New Orleans	Regulatory and Industry Group Engineers Industry Representatives	WAMAC	Regulators Industry Groups	Herb Falk spoke on ICCP security	Engagement completed.
Workshop between Fast Simulation and Modeling and IECSA Project Participants April 21, 2004 Palo Alto, CA	GE (IECSA prime contractor) ABB (FSM Prime Contractor) EPRI and E2I personnel	WAMAC Distribution Consumer	Vendors Suppliers	Meeting to present overview of the two CEIDS projects, review status, present IECSA tools and methodologies and brainstorm ideas for integrating the two project efforts going forward.	Engagement completed, some follow up required.
Australian Power Grid April 21-23, 2004 Sydney, Australia	Utility Engineers	Architectural Issues – 61850, CIM, Security, Network Management	Utilities	Frances Cleveland conducted 3 day stakeholder engagement through Ray Lings of EPRI	Engagement completed, some follow up required.
EPRI PQA May 17-19, 2004 Garden City, NY	Utility Engineers Vendors & Supplier personnel	Consumer/R TP DER	Utilities Vendors & Suppliers	Erich Gunther delivered a keynote address on IECSA and held individual engagements	Engagement completed
IEEE/PES Broadband over Power Lines Standards Interest Meeting June 7, 2004 Denver, CO	Various Personnel	Various domains and functions	Utilities Vendors & Suppliers Standards Bodies	Erich Gunther presented on IECSA and held a discussion on how standards for broadband over power lines could play a role in an integrated energy and communications system architecture	Engagement completed

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