

GE
Energy

CIM Development and GE Energy

CONCORDA
PSLF

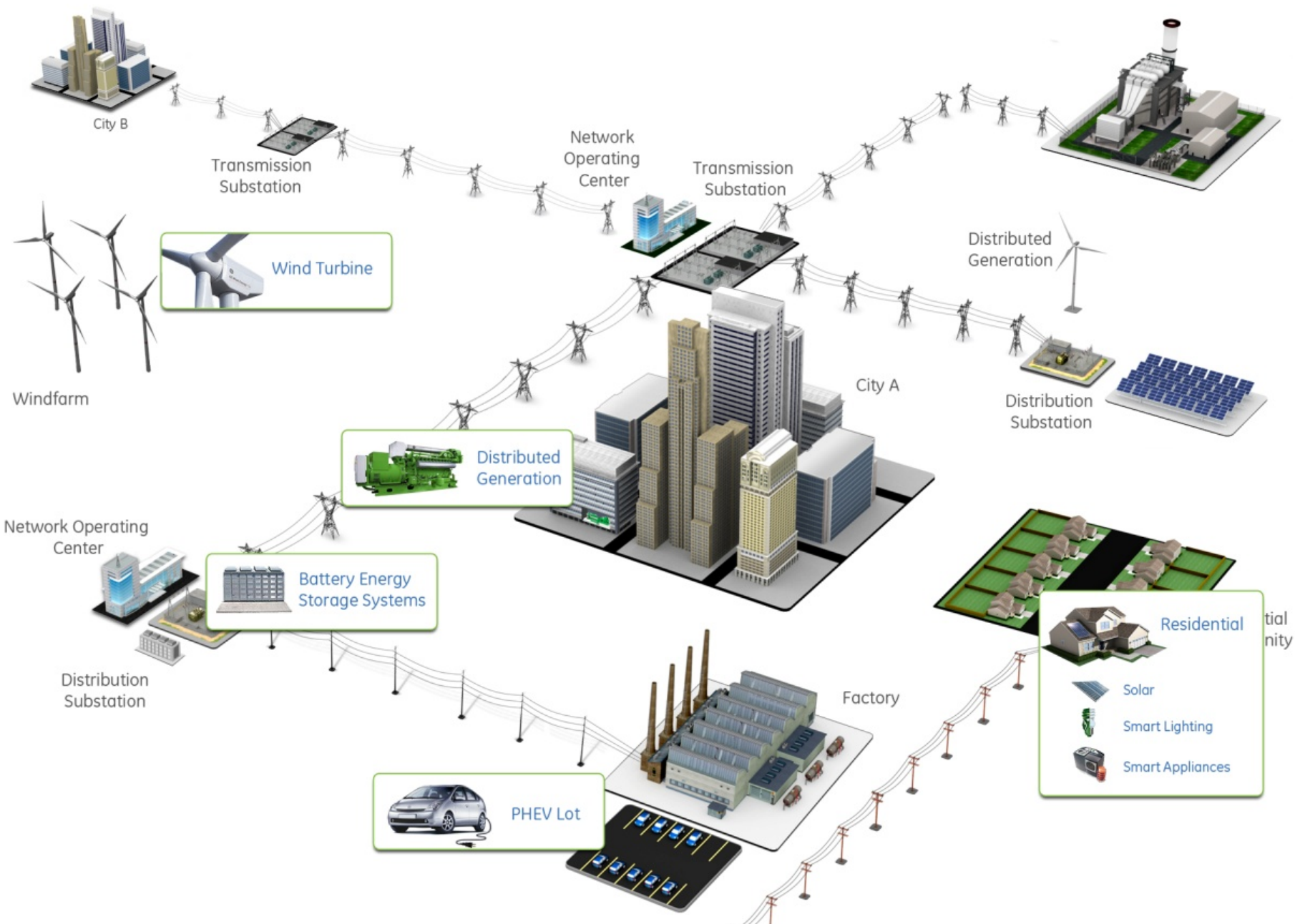


CIM USERS GROUP MEETING
May 12-15, 2009
Genval, Belgium

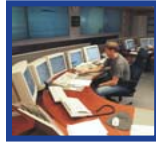


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Anticipating the Challenges of Tomorrow...



CIM from Utility Perspective



- **Operating efficiency**
- **System reliability**



- **Modular/standard**
- **Less cost, time, risk**



- **Performance monitoring**
- **Control devices**



- **Asset protection**
- **Life extension**



- **Performance visibility**
- **Remote control**



- **Customer billing**
- **Demand management**



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CIM from Vendor's Perspective

- A superior data management technique
- Eliminates the need for developing and maintaining custom translators
- Allows tagging of equipment for asset management purposes
- A unified information exchange platform to enable advanced technologies
- Aligned with our business objectives & priorities



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From Conceptualization to Implementation

Agree to a common standard



Map the standard to proprietary format



Develop the persistence storage

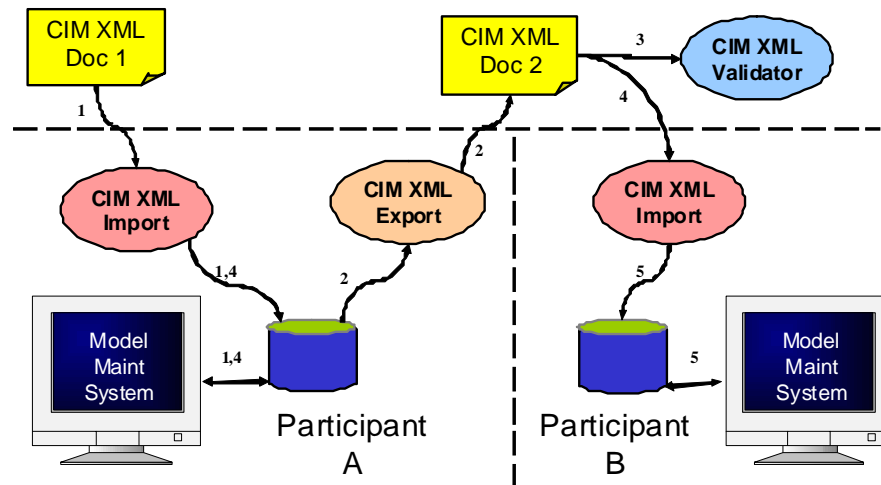


Transfer the Data and Test Compliance



Inter-Operability Test (I.O.P)

- Comprehensive test procedures covering all areas of import/ export and validation
- Based on :
 - “CIM planning Network Model Exchange Profile for Steady State and Short Circuit”
- Confirms to IEC 61970 standards



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The 2008 Transmission Planning Interoperability Test

The Power of the Common Information Model (CIM) to Exchange Power System Data **1018440**

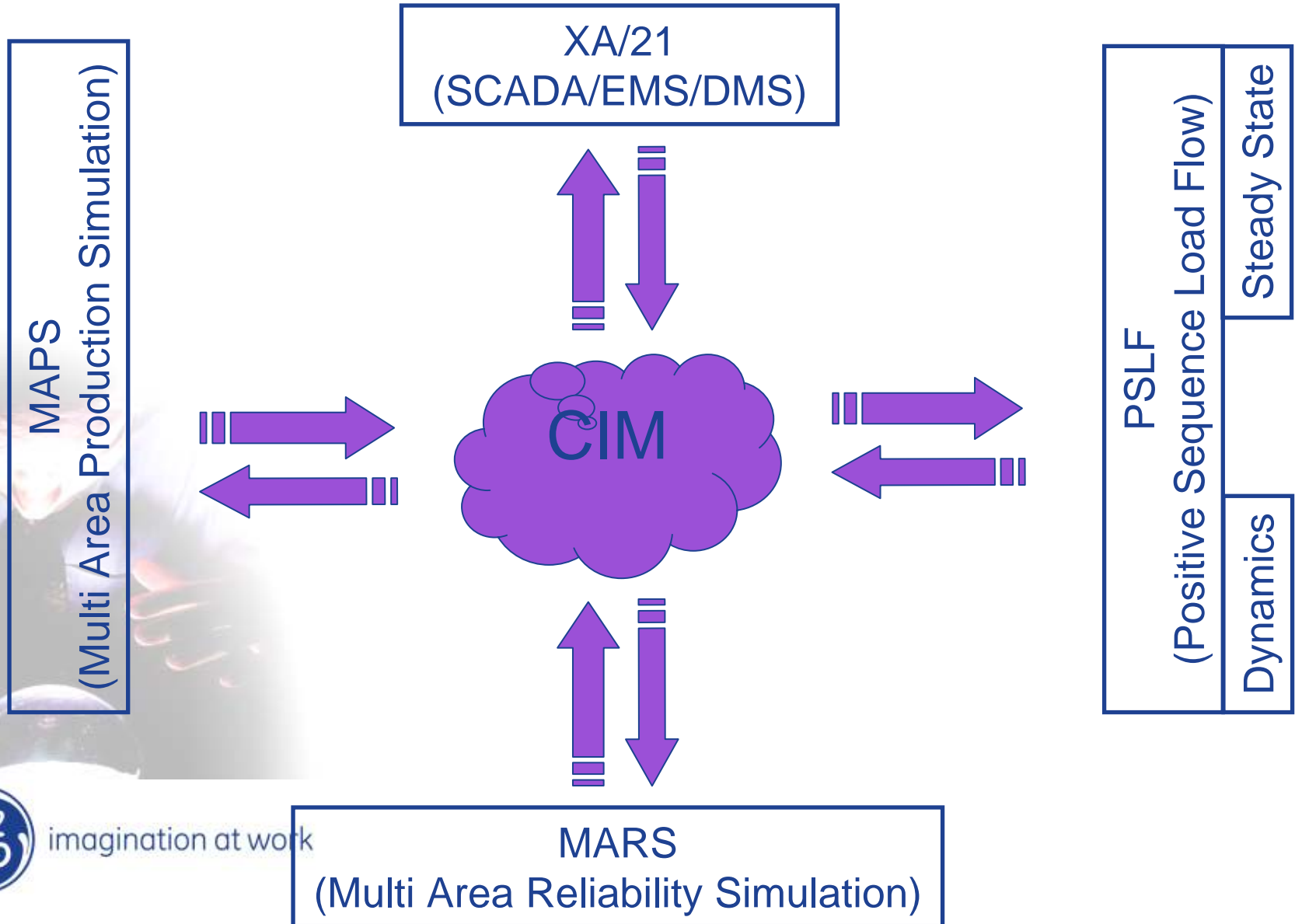
Final Report, March 2009

Test Number	Import doc-1	Run PF sol-1	Import doc-2	Run PF sol-2	Compare sol-1, sol-2
GE w/GE Planning Model	P	P – Solved	P – w/SPTI export	P -Solved	solutions are within tolerance
GE w/GE Planning Model	P	P –Solved	P – w/GE export	P -Solved	solutions match
GE w/SPTI Planning Model	P	P – Solved	P – w/GE export	P – Solved	solutions match
GE w/SPTI Planning Model	P	P – Solved	P- w/SPTI export	P – Solved	solutions are within tolerance
SPTI w/GE Planning Model	P	P – Solved	P- w/SPTI export	P - Solved	solutions are within tolerance
SPTI w/SPTI Planning Model	P	P – Solved	P – w/SPTI export	P – Solved	solutions match
SPTI w/SPTI Planning Model	P	P – Solved	P – w/GE export	P – Solved	Solutions are within tolerance



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Bringing it Together.....



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MARS
(Multi Area Reliability Simulation)

Next steps:

- Address issues identified based on the current IOP
- Actively participate in the development of the CIM standard for Dynamics
- Dynamics IOP currently scheduled for July 09
- Further develop translator for Planning-to-Planning data exchange and Dynamic data transfer as per CIM-UCTE profile
- Offer CIM as an integral part of GE Energy planning tools



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