

# Transactive Energy Challenge Kickoff Meeting

September 10-11, 2015 National Institute of Standards and Technology Gaithersburg, MD Campus

## POTENTIAL TE PROJECT WORKSHEET

PROJECT DEVELOPMENT AREA for TRANSACTIVE ENERGY / MODELING AND SIMULATION		
<p><b>Title:</b> Reference Grids TE Scenarios “Well Posed Problems”</p>	<p><b>Brief Description:</b> Write 2-3 sentences/bullets to describe the project development area and the necessary partnerships</p> <ul style="list-style-type: none"> <li>• Topologies</li> <li>• Identities and capacities of elements</li> <li>• Keep it simple from beginning                             <ul style="list-style-type: none"> <li>– One complexity at a time</li> </ul> </li> </ul>	<p><b>Challenges:</b> Identify the anticipated challenges for creating a workable demonstration or testbed for the concept</p> <ul style="list-style-type: none"> <li>• Utility distribution grid input                             <ul style="list-style-type: none"> <li>○ Is PNNL already doing this?</li> </ul> </li> </ul>
PROJECT APPROACH		
<p><b>Major Tasks:</b> Describe a possible approach to developing the project, including 3-5 major tasks</p> <ul style="list-style-type: none"> <li>• Identify baseline scenarios</li> <li>• Identify test sets                             <ul style="list-style-type: none"> <li>○ IEEE test cases (transmission/distribution)</li> <li>○ Others?</li> </ul> </li> <li>• Identify the data elements needed to run a simulation</li> <li>• Identify standard formats for the data elements</li> <li>• Define metrics for the simulations, to support intercomparisons</li> </ul>	<p><b>Major Milestones with dates:</b> Define 3-5 milestones that can be used to measure progress (what markers can we use to measure and assess progress in development?)</p> <ul style="list-style-type: none"> <li>• Initial set of base cases identified</li> <li>• Base cases populated</li> <li>• Base cases populated and structured</li> </ul>	<p><b>Performance Targets:</b> Identify 1-5 (quantitative) performance targets that define a successful outcome (what does success look like?)</p> <ul style="list-style-type: none"> <li>•</li> </ul> <p><b>Limits:</b> What parameters should be used to define the realistic limits to use of the system/platform</p> <ul style="list-style-type: none"> <li>• Use of scenarios by researchers</li> <li>• Use of scenarios by solutions providers</li> <li>• Use of scenarios by utilities</li> </ul>
PROJECT IMPACTS and DEMONSTRATION		
<p><b>Impacts:</b> Describe the anticipated economic benefits (new products, jobs, economic growth, exports, tax base, etc.) as well as impacts on energy, health, safety, environment, and other quality of life aspects</p> <ul style="list-style-type: none"> <li>• Sequence of problems</li> <li>• Validation tests (inputs for)</li> <li>• Credibility tool for models</li> </ul>	<p><b>Demonstration vehicle:</b> Describe how you might demonstrate the project concept (physical or virtual)</p> <ul style="list-style-type: none"> <li>• Successful execution on multiple platforms</li> </ul> <p><b>Status of Commitment:</b> Please advise on the current status of the CPS idea detailed on this worksheet (underline/circle one):</p> <p><b>Launched</b></p> <p><b>Ready for Public Announcement</b></p> <p><u>IN DELIBERATIONS / NEGOTIATIONS</u> – Based on PNNL Status</p> <p><u>CONCEPT ONLY STAGE / NO PARTNERS YET</u> – Based on PNNL Status</p>	<p><b>Team Lead:</b> Khaled Masri, NEMA</p> <p><b>Participants and Roles:</b></p> <ul style="list-style-type: none"> <li>• Warren Wang, Navigant; Steven Ray, CMU; Jason Veneman, MITRE; Alex Brissette, ABB; Rob Stewart, Pepco; Amro Farid, Dartmouth</li> </ul> <p><b>Additional Notes:</b></p> <ul style="list-style-type: none"> <li>• Team would jointly accomplish milestones of what are the cases, what is the data, and how should it be structured</li> </ul>