Workgroup 4 Task Outline: Utility Planning and Analysis

TEEC Chair: Scott Simms

TEEC Members:

Task Leads: Rick Wallace and Adam Bless

Meeting Support: Therese Hampton

Interns: TBD

Purpose: Utility Planning and Analysis strategy workgroup to address plan elements #11

The purpose of this workgroup is to explore how our Utilities will be impacted and integrated with PEV's. As adoption of PEV's grows what will be the impacts to the grid and what are ways to mitigate these impacts. Steering charging to off peak times has been the leading issue raised but what are the best mechanisms and policy that gets us to that goal. Explore the costs and impacts of PEV's on home utility bills with different types of heating, for example would time of use be advantageous for the home owner with electric resistance heating. What are the roles of Utilities in the roll-out of PEV's. Investigate possible utility based solutions to multi-family housing PEV charging. What are the impacts of peak demand charges to commercial customers for large charging facilities and PEV fast chargers. How can smart grid technology be employed to integrate PEV's more effectively. These topics and others will be explored and reported on in the final Energizing Oregon report.

Schedule

First meeting = November 2011

Core Committee meetings (meetings/conference calls) = Every four weeks Nov. thru July then two additional meetings to finish up (12 meetings)

Sub-Committee meetings (meetings/conference calls) = A possible nine meeting or as needed.

Final meeting/conference call

Sub-group meetings frequency TBD

Perception and Awareness Survey's

Conduct survey's to ascertain current knowledge of PEV's and related technology and how they affect their utility bills and the grid. Look for opportunities to influence the perceptions of PEV adopters and how they charge them. This could be combined with Workgroup 3 survey activities.

Potential Topics of Investigation

- 1. Investigate Time of Use (TOU) charging as a deterrent to charging on-peak.
- 2. Look into other methods of discouraging on-peak charging such as education/outreach or smart charging.
- 3. Investigate possible barriers utilities may have for PEV commercialization.
- 4. Investigate smart-grid opportunities with PEV technology.
- 5. Investigate PEV related issues at multi-family residential buildings.
- 6. Study impacts of PEV on utility bills for households with different electricity use profiles.
- 7. Discussion with group to employ a possible pilot program where one set of EV users are given training and education materials and the remaining users are given nothing.
- 8. Investigate the possibility of localized grid impacts. Find areas of high PEV density and measure impacts on local grid infrastructure.
- 9. Investigate peak demand vs. consumption chargers for commercial entities with PEV charging particularly with fast charge applications.
- 10. Investigate utilities role and involvement with EV technology adoption and deployment
- 11. Ask group for suggestions for other topics.

Budget

\$30,000

Research and/or data collection. Possible outreach materials, (see deliverables)

Tasks/Next Steps

- 1) Schedule meeting one for the committee.
- 2) Discuss topics and create list of topics to be explored. Use the above tasks as a start and add or remove tasks as appropriate.
- 3) Establish appropriate sub-committees.
- 4) Contract with project management/facilitation.
- 5) Hire interns?
- 6) Meeting one (early November):
 - + Brainstorming and outline plan for development
 - + Determine data and research needs to feed into research
 - + Develop plan for delivering project outputs
 - + Determine actions for partners and subgroups

Key Partners

Utilities, PUC, ODOE, BPA, ECOtality, Rocky Mountain Institute, IBEW, CUB, Smart Grid

Committed Partners

Bonneville Power Administration, Scott Simms – Policy Strategist

Business Oregon, Mark Brady -

Clark Public Utilities District,

CUB, Gordon Feighner, Utility Analyst

ECOtality, Stephen Schey – Director Stakeholder Services

Eugene Water and Electric Board, Dean Ahlsten -

General Motors, George D. Bellino -

IBEW 48/NECA, Clif Davis

Northern Wasco County PUD, Dwight Langor -

Oregon Department of Energy, Vijay Satyal -

Oregon Municipal Electric Utilities Association, Tom O'Conner – Executive Director

PacifiCorp-

PGE-, Rick Durst-E Manager, Joe Barra-

Rocky Mountain Institute, Jay Tankersley – Program Manager

Rogue Valley Clean Cities Coalition, Sue Kupillas - Coordinator

Salem Electric, Roger Kuhlman

Smart Grid, Kelly Cowan

Deliverables

Report on findings from task list above to be included in final Energizing Oregon PEV Market and Community Plan.

Outreach: PEV Utility consumer brochure. PGE has done some of this but the smaller utilities have done little or none. Work has been done in an ad-hoc way. Create information that can be used throughout the state. This effort crosses more than one workgroup and should be coordinated.