DATE APPROVED:	January 20, 2016
TITLE:	Strategic Policy for Electrical Energy Resources

The Board of Public Utilities adopted, as part of a strategic policy, the following resource recommendations adapted from the 7 July 2015 "Future Electrical Energy Resources" report:

- 1. The definition of "carbon-neutral electrical energy provider" adopted by the Board of Public Utilities on January 20, 2016 should accompany or be included in board's "carbon neutrality" goal.
- 2. Incorporate "environmental impact, specifically greenhouse gas production," as a factor to be considered in all resource decisions.
- 3. Encourage more efficient use (conservation) of electrical energy by Los Alamos County consumers.
- 4. Support replacement of petroleum-fueled motor vehicles with all-electric vehicles. Consider locating more electric vehicle charging stations around the County or at LANL.
- 5. Maintain and operate the Abiquiu and El Vado hydroelectric plants as the backbone of the Los Alamos County long-term future electrical supply.
- 6. Plan to exit San Juan Generating Station share ownership in the mid-2020's, under the most opportune circumstances.
- Explore sale of the Laramie River Station purchased power agreement. Sell if and when economically feasible and consistent with the needs of the Electric Coordination Agreement Pool, considering the continued carbon production and increasing regulatory risks associated with that plant.
- 8. Continue to explore participation in the UAMPS nuclear power project as a replacement source of base power, carefully considering plant safety, realistic life-cycle costs, and potential for a cooperative power-sharing arrangement with DOE/LANL after 2025.
- 9. Pursue access (transfer or long-term lease) to suitable utility-scale photo-voltaic generation sites presently owned by DOE/LANL.
- 10. Monitor feasibility and costs for battery storage, including at least Li-ion and Vd-flow batteries.
- 11. Explore feasibility (including access to present DOE/LANL lands) and estimate costs of pumped hydro storage somewhere within Los Alamos County.
- 12. Evaluate feasibility, including market interest, for a community solar garden if bandwidth or other limits are not being approached by individual installations.
- 13. Explore current interest in a hydroelectric project at Cochiti Dam with the Pueblo.

DATE APPROVED:	March 16, 2016
TITLE:	Strategic Policy for Distributed Energy Resources (DER) and Rate Structure

The Board of Public Utilities adopted, as part of a strategic policy, the following recommendations from the 7 July 2015 "Future Electrical Energy Resources" report:

- 1. Complete smart meter implementation for all customers.
- 2. Develop an engineering model of the distribution system that will indicate how much DER generation can safely be absorbed.
- 3. Complete studies to determine how much DER generation can be tolerated before causing an unacceptable number of bandwidth exceedances.
- 4. Establish limits, based on DER generation absorption and bandwidth exceedance considerations, on how much DER generation can be tolerated in the system. Update these limits as necessary. Make it clear that permit issuance will be suspended once those limits have been reached pending expansion of system tolerance of increased DER generation.
- 5. Require smart inverters (at least "Phase 1") on new DER systems as they become available. After smart inverters are available, all DER system inverter replacements should be of the smart type.
- 6. It clear in DER installation permits that rates and rate structures are not guaranteed to any point in the future.
- Determine whether utility-scale, circuit, or neighborhood scale DER storage, or combination(s) of these approaches make the most sense technically and economically for firming DER generation. Take that determination into account in any rate structure.
- 8. large customers, require or encourage (via rates) that at least large loads be dispatchable. County government and the Department of Public Utilities can and should lead by example.
- For large DER producers, require or encourage (via rates) dispatchable storage and generation and Phase 2 or 3 inverters as they become available. The County government and the Department of Public Utilities can and should lead by example.
- 10. All DPU customers (DER and non-DER) should be charged the same appropriate rate(s) for all services and energy (not just net energy) supplied by the utility.
- 11. Implement Time-of-Use pricing for both consumption and generation once smart meters are available to do so.
- 12. DER producers should be paid for the power they supply to the utility based on at least the average estimated avoided cost for the time period in which it is supplied. The rate(s) should reflect whether the power is firm and whether it is dispatchable.
- 13. Consider whether or not a non-economic Value-of-Solar Tariff should be a part of the reimbursement rate structure for DER generation and how it should be phased out as solar benefits relative to other non-carbon sources decline.

ATTACHMENT C