Arkansas Water Plan Update

Thermoelectric Water Demand Technical Work Group Meeting
Conference Call Summary
April 1, 2013 from 2 pm to 3 pm CDT

The following summary was prepared by CDM Smith and is intended to capture the general topics, and discussion that was held and is not intended to be a verbatim transcription of the conference call. The following individuals participated in the call:

Stephen Cain – Arkansas Electric Cooperative Corporation
Greg Carter – American Electric Power
Ed Swaim - ANRC
Chris Soller – ANRC
Rick Brown – CDM Smith
Mitch Horrie – CDM Smith

The purpose of this call was to update the Work Group on progress made and to discuss outstanding items remaining for the Thermoelectric Water Demand Forecast. The goal of this meeting was to finalize assumptions with respect to thermoelectric power generation water use factors at facilities in Arkansas and ensure that the forecast appropriately characterizes the operations of thermoelectric power facilities in Arkansas.

The meeting began with a brief review of timeline of the Arkansas Water Plan Update, highlighting the upcoming full Work Group meeting at the beginning of May. Also discussed was CDM Smith's desire to have the Thermoelectric Work Group members attend public meetings in June if available.

CDM Smith and the Thermoelectric Work Group reviewed the water use factors (gallons/Megawatt-hour) compiled by the Work Group. The Work Group was in agreement that the facility-specific water use factors are appropriate for water demand forecasting purposes.

CDM Smith agreed to utilize the Work Group's suggested water use factors but cautioned that anytime we deviate from reported values and use expertise and literature to establish assumptions we need to explain that the data is objective.

The Work Group discussed the differences in water use factors for facilities located on rivers versus facilities located on lakes. The Work Group remarked that once through cooling facilities use about 350 gal/Mwh when located on a lake. Once-through cooling facilities located on a river system are harder to determine.

The Work Group advised that, depending on a facility's age, some power plants in Arkansas may be more efficient because they utilize "steam reheating". The Work Group advised that facilities built prior to 1965 are likely to not utilize steam reheating and thus use more water than facilities built after 1965. The Work Group asked that CDM Smith look into the age of each plant to determine if they were built before or after 1965 and to adjust the water withdrawal factors to 35,000 gallons per mega-watt hour for once-through cooling facilities built after 1965 and 40,000 gallons per mega-watt hour for once-through facilities built before 1965.

The final topic of discussion was with respect to future facility retirement. The Work Group acknowledged that some units will likely be retired. When that retirement occurs, it is appropriate to assume that power generation needed to make up for generation lost from retired facilities will occur at locations where current generation is occurring because there would be existing transmission infrastructure, water, and fuel and land use redevelopment opportunities. Thus the Work Group did not recommend incorporating an approach that assumed facility retirements and new locations for facilities to make up for generating capacity lost from retired plants.