



Charlotte City Council

Environment Committee

Meeting Summary for July 21, 2014

COMMITTEE AGENDA TOPICS

- I. **Subject:** **Catawba-Wateree Basin Water Supply Master Plan**
 Action: Unanimously approved staff's recommendation to adopt a resolution in support.
- II. **Subject:** **Coal Ash Due Diligence Review**
 Action: None

COMMITTEE INFORMATION

Present: John Autry, Claire Fallon, Ed Driggs, David Howard and Kenny Smith
Time: 3:00 p.m. to 4:03 p.m.

ATTACHMENTS

1. Agenda Package
2. Master Plan Briefing.ppt

DISCUSSION HIGHLIGHTS

Chairman Autry called the meeting to order and asked everyone in the room to introduce themselves. He then turned it over to Assistant City Manager Hyong Yi.

I. **Catawba-Wateree Basin Water Supply Master Plan**

Mr. Yi stated that this item is a follow-up from the last meeting. He stated that today the Committee would get a quick refresher and would be asked to adopt a resolution in support of the Plan. He then turned it over to Barry Gullet.

Environment Committee

Meeting Summary for July 21, 2014

Page 2 of 5

Mr. Gullet began reviewing the “Catawba-Wateree Water Supply Master Plan” presentation (copy attached). He discussed the background information, implementation schedule and the responsibilities of Charlotte and Duke Energy. He clarified some misinformation that is out there, discussed the future of the Master Plan and requested the Committee adopt a resolution supporting the Water Supply Master Plan.

Fallon: Duke Energy sends a paper bill every month and it shows how much energy you use in comparison to other people. Could we send something like that if it would help?

Gullet: I think it would help. We have talked about that as being a part of our bill. It’s complicated, but it’s on my wish list.

Fallon: Could we pair up with Duke?

Gullet: No, they don’t have that data and our billing cycles don’t line up. The most opportune thing is to put it on the water bill.

Smith: Regarding technology for leaks, is that the direction the technology is going?

Gullet: Yes, we are moving in that direction.

Driggs: Are people advocating for the conversion to the hybrid system you described on the “Clarification” slide?

(Council member Howard entered the meeting)

Gullet: There are two parts to that. One part is the hybrid technology has not been applied in the southeast. So it’s not believed to be feasible here. It might work out west. Duke is involved in the research and hopefully something will come along to be more efficient. The people who manage the cooling tower in South Carolina say their tower is not a hybrid; it’s just a cooling tower. That is where some of the confusion is coming from.

Driggs: So, if we followed the example in South Carolina, we would actually be using more water?

Gullet: Yes.

Autry: What are some of the triggers that would require you to look at this Plan before the 10-year period?

Gullet: Development trends in the region change and if someone in the upper or lower end of the basin snags a large, wet industry that needed to use a lot of water then that is something we would look at. An economic change that could influence the long term usage would make us look at it. Technology or regulatory changes could also make us look at it more frequently.

Driggs: I just want to clarify what this is and what it isn't. We are really talking about creating

Environment Committee

Meeting Summary for July 21, 2014

Page 3 of 5

consensus of all the stakeholders, no financial commitments being made, Duke has agreed to their role but it's not legally binding. This doesn't address pricing strategy. I think the key purpose is to start thinking that far ahead and start a course. Is that a fair description?

Gullet: Yes.

Driggs: What would it take later down the road, for a binding course of action of all the parties? At some point people will have to start spending money. How do we transition from the good intentions to the outcome?

Gullet: A useful purpose of this Plan is it gives folks ideas about things that will help. The Plan has laid out some targets for what people need to do over the next 50 years to most benefit the whole region from a water supply perspective. The role of monitoring the trends drives the need for more binding actions going forward.

Driggs: What's the status of buy-in among other stakeholders?

Gullet: I'm hoping Charlotte would be the first to adopt. I brought it to you all first. We are in the process of scheduling the other towns.

Smith: How many stakeholders are we rolling this out to?

Gullet: There are 19 organizations, but there are other folks I would consider stakeholders.

Autry: We talked about CMUD customers reducing their consumption and it's very aspirational for Duke to use new technology, etc. I would like them to also consider roof-top solar and solar farms which would require no water to fuel them at all. I know it's not a fulltime solution, but it would help reduce water use and it would have less impact on the rate payers. Solar farms and wind turbines should be considered and would need to be closer. Something else to consider is you are also required by state law to produce energy at the lowest possible cost and that will require help from people in the Senate to change. We also discussed how to get customers to use less water, 20% of usage is irrigation and that means watering lawns and golf courses. How do we change that behavior to irrigate an invasive plant? We talk about being a leader in the region and we also want to be a leader in the region for reducing our carbon foot print and saving as much water as we possibly can. I know CMUD is committed to that and I want to make sure our partners at Duke are committed to do that. I will entertain a motion.

Council member Driggs made a motion and was seconded by Council member Fallon to approve the resolution. (*Motion passed unanimously*)

II. Coal Ash Due Diligence Update

Mr. Yi stated that today he will give the Committee an update on the due diligence review. He said that staff has done a fantastic job of looking at all issues related to this project. This process has been focused on two questions: 1) is it unambiguously good for the environment and 2) is it unambiguously good for the airport.

Environment Committee

Meeting Summary for July 21, 2014

Page 4 of 5

Mr. Yi stated that during the due diligence process they realized it was highly unlikely they would want the coal ash underneath the runway and/or on the airfield. As small as the risk might be, if something happened to the encapsulation, the risk is too great for the airport to consider given what the consequences would be if such an event ever occurred. Most of the technical obstacles dealing with moving the coal ash and encapsulating the coal ash, we think we can handle. The science is good enough that we can manage it and mitigate it. During the course of this process we have developed a counterproposal which we have put before Duke Energy. We are now in the process of waiting on Duke to respond to the counterproposal and just like we needed time from Duke, Duke needs time from us. They've asked for time to do their due diligence review. We think is only fair to allow them time.

Autry: How much time will they need?

Yi: They will need a few weeks to do their assessment and engage with contractors to help them do their assessment. I think it would be the first part of August before they are complete and ready to communicate back to us.

Driggs: Are you going to tell us what the counterproposal consisted of?

Yi: At this point, I would like to keep it general so that we don't put Duke in a box.

Fallon: Did anyone get me an answer about vaporization?

Yi: It was included in the Q&A from the last meeting. We can get you another copy.

Smith: At one point we asked about Duke's other options other than the airport. Has there been any information shared on that?

Yi: We've asked, but Duke has not shared that with us.

Howard: I would hope that one of the options is burying it on the site where it is. It's a big area up there and maybe we don't have to truck it away.

Driggs: One of the issues in the beginning was liability. Did we look at what kind of continuing liability the City might have or are we putting that on hold until we hear back about the counterproposal?

Yi: We looked at the liability with the proposal as originally put to us by Duke and Charah, making sure the City is not the one liable for the coal ash.

Autry: So to characterize this, staff completed their task within the 60 day period of their assessment of looking at the encapsulated landfill on the airfield. The risks may be small, but are unacceptable as a solution; therefore, a counter proposal was made to Duke. Duke is taking some time to consider and hopes to come back the first part of August with an answer. That will give us another opportunity to discuss whether that is something we can live with or not.

Environment Committee

Meeting Summary for July 21, 2014

Page 5 of 5

Phocas: I'll give a quick update on the legislation and let you know that the Senate rejected the House's version of the Bill and it has now gone to Reconciliation. The two main reasons for the rejection is the House's version allows DENR to: 1) grant variances to the timelines to clean up the ash ponds and the Senate wants firm timelines and 2) the House would move the new Coal Ash Management division to DENR instead of the Department of Public Safety. The Charlotte Business Journal reports that Representative Samuelson hopes for Reconciliation by the end of the week. Under the current legislation, the Riverbend coal ash pond is supposed to close as soon as practical but no later than December 21, 2019. Plan must be submitted no later than December 21, 2016.

Autry: I thought Charah was saying it could take 5 years to clean out. If you don't submit a plan until 2016, then you only have 3 years to comply.

Phocas: That's also part of what Duke needs to consider when considering the counterproposal. The legislation is very detailed and Duke has to go through all of it.

Driggs: Is it fair to infer that any outcome on this Bill would require coal ash being removed at Riverbend?

Phocas: Yes.

Driggs: So, we can operate on the assumption that it has to go somewhere?

Phocas: Yes, unless there is a major change in the legislation.

Yi: We will back in front of you in August.

Meeting adjourned at 4:03 p.m.

Environment Committee

Monday, July 21, 3:00 – 4:00 p.m.
Charlotte-Mecklenburg Government Center
Room 280

Committee Members: John Autry, Chair
Ed Driggs, Vice Chair
David Howard
Claire Fallon
Kenny Smith

Staff Resource: Hyong Yi, Assistant City Manager

AGENDA

- I. **Catawba-Wateree Basin Water Supply Master Plan** – 35 minutes
Staff Resource: Barry Gullet, Charlotte-Mecklenburg Utility Department
Staff will continue discussions on the Catawba-Wateree Basin Water Supply Master Plan.
Action: Request the Committee to recommend Council adopt a Resolution in support of the plan.

- II. **Coal Ash Due Diligence Update** – 25 minutes
Staff Resources: Hyong Yi, City Manager's Office and Rob Phocas, Neighborhood & Business Services
Staff will provide a status update.
Action: For Information Only

Next Meeting

Wednesday, August 13, 2014; 12:00 p.m., Room 280

Distribution:	City Council Bob Hagemann	Ron Carlee, City Manager Stephanie Kelly	Executive Team Environmental Cabinet
---------------	------------------------------	---	---



Catawba-Wateree
Water Supply Master Plan
Environment Committee Briefing Follow Up
Charlotte-Mecklenburg Utility Department

July 21, 2014



Background

- Water Supply Master Plan's goal is to ensure water availability for the region to sustain growth beyond 2050
- Plan presented to Council May 12, 2014
 - Referred to Environment Committee
- Presentation to Environment Committee June 16
- Additional information requested:
 - Actions required by Charlotte-Mecklenburg
 - Actions required by Duke Energy
- Without a plan, the region is likely to reach the capacity of the river to sustain growth by mid-century



Master Plan Implementation Schedule

Table 1-5 Proposed Implementation Schedule for Recommended Planning Scenario (MP-01Mb)

Action	Schedule					
	2015	2025	2035	2045	2055	2065
High-end Water Use Efficiency (WC-01D)	Implement	Continue Monitor	Continue Monitor	Continue Monitor	Reduction Goal Year 2055	All Water Suppliers
Lower Upper Catawba Intakes (CI-01)	Feasibility/Predesign	Financing/Permitting	Design and Construction	Complete by 2045	Not CMUD	
Lower Mt. Island Riverbend Critical Intake (CI-05)	Recognition of Change	Not CMUD				
Lower Lake Norman Critical Intake (CI-03)		Duke Energy		Operations Change		
Lower Lake Wylie Critical Intakes (CI-04)	Feasibility/Predesign	Financing/Permitting	Design and Construction	Complete by 2045	Not CMUD	
Raise Summer Target Operating Levels by 6" (RO-02B)	Evaluate Impacts of Change	Modify CRA* (if needed)	Duke Energy			
Semimonthly LIP Stage Lookup (LP-03)	Operations Change	Impacts Duke Energy first				

* Comprehensive Relicensing Agreement

- 
- ### What Does the Plan Ask of Charlotte?
- Continue water use efficiency improvements
 - Currently 100 gallons/person/day residential usage
 - Target is 80 gallons/person/day by 2055
 - Requires continued, long-term conservation program
 - Tactics could include water audits, education, incentives, rate structure, technology
 - Follow established drought response plans
 - Continue following Low Inflow Protocol during drought
 - Support regional water resource planning
 - Adopt resolution supporting Plan
 - Continue active participation in Water Management Group
 - Address water supply contingency planning
 - Need already identified outside of Plan



What Does the Plan Ask of Duke Energy?

- Future modifications to water intakes at power plants
- Reduce hydro power production within 1 day of drought status change (instead of 5 days currently)
- Evaluate changes in lake management to increase summer water level targets in 3 lakes by 6"
- Duke Energy asked to improve water use efficiency for thermal power production
- Continue energy conservation programs (saves water)



What Does the Plan Ask of Duke Energy? (continued)

- New plant assumptions based on technology consuming 1/3 less water than existing coal plants, 1/2 as much as new nuclear
- Future plants located farther down river than originally planned where appropriate
- Request changes to federal operating license to allow improvements to drought response plan, follow Low Inflow Protocol during drought
- Support regional water resource planning
 - Adopt resolution supporting Plan
 - Continue active participation in Water Management Group



Clarification

- Mis-information has been distributed by others about South Carolina Electric & Gas's Wateree Steam Station's water consumption
- Plant converted from once-through cooling to cooling towers – *NOT* to a more water efficient "hybrid" system
- Cooling tower plants withdraw less water, but consume 30% - 40% more water than once-through cooling systems
- Conversion was driven by high water temperatures in the Wateree River which restricted plant operation
- Converting Duke Energy's three existing plants that use once-through cooling to cooling towers would increase their total water consumption by 15 MGD



Future of the Master Plan

- The Water Supply Master Plan is an on-going process with on-going regional conversation and engagement
- The Plan Report is subject to revision as more information and input is gathered
- The Catawba-Wateree Water Management Group is committed to monitoring trends impacting water use across the region, assumptions made in the plan, and periodically updating the modeling, planning processes, and recommendations at least every 10 years



Resolution

- Request is to recommend Council adopt a resolution supporting the Water Supply Master Plan
- Resolution is:
 - Non-binding
 - Not regulatory
- Adopting resolution demonstrates:
 - Commitment to regional water resources planning
 - Regional leadership
 - Sustainable growth initiative



Questions?