

KELLOGG, HUBER, HANSEN, TODD, EVANS & FIGEL, P.L.L.C.

SUMNER SQUARE
1615 M STREET, N.W.
SUITE 400
WASHINGTON, D.C. 20036-3209

(202) 326-7900

FACSIMILE:

(202) 326-7999

July 30, 2010

By E-Mail and First-Class Mail
Special Master Kristin L. Myles
Munger, Tolles & Olson LLP
560 Mission Street, 27th Floor
San Francisco, California 94105

**Re: Opening Letter Brief of the State of South Carolina
South Carolina v. North Carolina, No. 138, Original**

Dear Special Master Myles:

South Carolina respectfully submits this letter brief in response to the Special Master's request for further explication of the parties' views on maintaining a single proceeding or bifurcating the proceeding. In particular, the Special Master has requested discussion of "whether, assuming we do not bifurcate the trial in this matter, some of the efficiencies sought to be achieved through bifurcation might be achieved through either or both of (1) phased discovery; or (2) a clearly delineated summary judgment phase that would include the threshold question of injury," stating that "the reason for pursuing these alternatives is that my present intention (which I do not expect will change) is not to bifurcate the trial."¹

South Carolina concurs that a single trial on all issues will be the most efficient and effective course, as explained in her prior briefs and at oral argument on April 23, 2010. Likewise, as set out in further detail below, phased discovery is not likely to lead to greater efficiency (and attempts to draw lines for discovery purposes could well generate inefficiencies through unnecessary motions to compel or quash). In addition, South Carolina believes that either party State should be able, following the close of fact and expert discovery, to move for summary judgment on whether South Carolina has met its threshold burden to show injury (or other issues). But because the parties disagree on the legal standard governing South Carolina's threshold burden — and because North Carolina's (erroneous) view of the law would require consideration of virtually all facts that would be relevant to the ultimate resolution of this dispute (an equitable apportionment) — discovery should not be phased (with one exception set forth below).

¹ E-mail from Special Master Myles to Counsel for the Parties (July 22, 2010).

A. Maintaining A Single Discovery Period Will Be The Most Effective and Efficient Course, Aside From One Discreet Issue That, In Any Event, Is Not Relevant To The Case At All

1. As the Special Master has indicated, the traditional approach of holding a single trial will be the most efficient and effective way to resolve this equitable apportionment dispute. North Carolina and the intervenors have not met their heavy burden to show that bifurcation would be more efficient.

The same reasons that counsel for a single trial likewise counsel for a single discovery period. Indeed, applying the same reasoning as when considering whether to bifurcate trials, courts consistently have concluded that “two discrete discovery periods would *not* serve judicial economy,” because “the parties are likely to come to the Court with *repeated* disputes over how requested material is related to [the various] issues, which will burden the Court time-wise, and unduly increase the costs of litigation for both parties.”²

Here, the witnesses — many of whom will testify as to facts concerning both the harm to South Carolina and the relative equities of water uses in both States — will be inconvenienced if they must appear at two depositions (just as they would be further inconvenienced by having to appear at two trials). See SC Br. 19-21 & Exs. 1-3 (Mar. 12, 2010) (affidavits from illustrative witnesses for South Carolina); SC Reply 5-7 (Apr. 9, 2010).

A single discovery period also will facilitate early settlement efforts and will not prejudice North Carolina or the intervenors. See SC Br. 22-26. Indeed, as South Carolina reported in its most recent, fifteenth progress report, the South Carolina Attorney General and Duke Energy reached a settlement of the Attorney General’s claims in opposition to Duke’s application for a Clean Water Act § 401 certification, which is part of Duke’s efforts to renew its federal hydropower license. Full discovery here likewise would “facilitate settlement discussions,” because it

² *THK Am., Inc. v. NSK Co.*, 151 F.R.D. 625, 633 (N.D. Ill. 1993) (internal quotation marks and footnote omitted); accord *Trujillo v. American Family Mut. Ins. Co.*, No. 1:08-CV-36 TS, 2009 WL 440638, at *5 (D. Utah Feb. 20, 2009) (“Separating trials and discovery on claims should be a last resort. Proceeding separately on discovery for two related claims can be expensive and time consuming.”) (footnote omitted); *Brown v. United States*, 179 F.R.D. 101, 107 (W.D.N.Y. 1998) (denying bifurcation where it “will only serve to create potential relevancy disputes engendering further unnecessary delay”); *Laitram Corp. v. Hewlett-Packard Co.*, 791 F. Supp. 113, 117 (E.D. La. 1992) (“If the Court limits discovery during the first period to liability only, the parties are likely to come to the Court with repeated disputes over how requested material is related to liability, damages, state of mind, or all these issues. The Court will not escalate the paper war that is surely impending in this case.”).

“assists each party in evaluating essential elements of the matters in issue and in assessing the risks associated with an adverse decision in the action.”³

2. A single discovery period also is warranted in light of the parties’ irreconcilable views on the legal standard for South Carolina’s threshold showing of injury. South Carolina maintains that it can satisfy its burden by showing that water demand within the Catawba River Basin exceeds supply in particular low-flow conditions and that South Carolina is injured as a result of the insufficient supply. *See infra* Part B. In contrast, North Carolina contends that South Carolina also must show — among other things — that South Carolina could not ameliorate its harm by adjusting its own in-state water uses. Although North Carolina’s legal position is wrong, if it were right, South Carolina may respond that it would be more equitable for North Carolina to adjust its own water consumption. *See* SC Br. 15-17; SC Reply 1-7. At that point, virtually all of the issues that North Carolina claims could be relegated to Phase Two would be fully relevant to a proper conception of the Phase One that North Carolina envisions. *See* SC Reply 8-9.

Bifurcation of discovery would require the Special Master to resolve those disagreements in the context of discovery motions — but in the absence of a full factual record on which to ground key rulings of mixed law and fact. In contrast, conducting a single discovery period will permit the Special Master to resolve critical legal questions on a full factual record, in the context of dispositive motions, and, if necessary, a trial. Such a resolution would frame the disagreement more fully and completely for the Special Master and the Justices on exceptions to the Special Master’s report. Moreover, the assembly of a complete record may obviate this dispute altogether, if the Special Master were to recommend that South Carolina carried its burden of showing harm even under the standard that North Carolina and the intervenors advocate. For that reason as well, a single discovery period proceeding would best serve judicial economy.

3. Although phasing of discovery is not generally appropriate, all agree that one discrete issue — which South Carolina maintains is not properly part of this case at all — is irrelevant to South Carolina’s threshold showing of injury and therefore can be deferred. North Carolina erroneously contends that an equitable apportionment should consider whether its interbasin transfers bring benefits to South Carolina citizens in adjacent river basins. *See* SC Reply 9-12. North Carolina thus claims the right, during times of drought, unilaterally to re-allocate waters otherwise available to South Carolina in the more populous Catawba River

³ *Johns Hopkins Univ. v. CellPro*, 160 F.R.D. 30, 35 (D. Del. 1995); *see also Laitram Corp.*, 791 F. Supp. at 117 (denying bifurcation or phasing of discovery where “neither the plaintiff nor the defendant . . . is likely to enter serious settlement negotiations until they have done substantial discovery regarding damages”).

Basin to the adjacent, far more rural Yadkin-Pee Dee Basin. North Carolina offers no authority for the extraordinary view that the equitable apportionment of one river system can, in effect, be transformed into multiple equitable apportionment actions of multiple river systems through the unilateral actions of the upstream State. North Carolina's position should be rejected, because it amounts to an extraordinary assertion of control by one State over another. Deferring that one issue of discovery until after a ruling on the threshold question of injury would eliminate the need to resolve it now, while also sparing all parties the considerable burdens of pursuing discovery concerning additional river basins.

B. South Carolina's Contention Interrogatory Responses Indicate That It Will Meet Its Threshold Burden To Show Harm

A single discovery period (save for the Yadkin-Pee Dee Basin issue, which South Carolina believes is irrelevant in any event) is further warranted because South Carolina is highly likely to meet its threshold burden to show harm. Thus, bifurcation would not produce efficiencies, but rather instead protract the proceedings in a costly and unwarranted manner.

1. The Court's Precedents Require a Downstream State Only To Show that Water Demand Exceeds Supply and that the Downstream State Is Injured as a Result

The Court's cases recognize that an interstate river is "more than an amenity, it is a treasure. It offers a necessity of life that must be rationed among those who have power over it." *New Jersey v. New York*, 283 U.S. 336, 342 (1931) (Holmes, J.). Equitable apportionment disputes are therefore decided "on the basis of equality of right," recognizing the "equal level or plane on which all the States stand." *Connecticut v. Massachusetts*, 282 U.S. 660, 670-71 (1931) (internal quotation marks omitted); *accord Kansas v. Colorado*, 206 U.S. 46, 97-100 (1907).

To meet its threshold burden to show harm, a complaining downstream State must demonstrate circumstances in which water demands exceed the available water supply and that the complaining State is harmed from that lack of water; if so, then an equitable apportionment analysis is required. Indeed, the Court has made clear that "where the claims to the water of a river exceed the supply a controversy exists appropriate for judicial determination." *Nebraska v. Wyoming*, 325 U.S. 589, 610 (1945); *see also Wyoming v. Colorado*, 259 U.S. 419, 471-85 (1922) (apportioning interstate river where water demand exceeded water supply); *Colorado v. New Mexico*, 459 U.S. 176, 187 n.13 (1982) (threshold harm shown where "any diversion by Colorado, unless offset by New Mexico at its own expense, will necessarily reduce the amount of water available to New Mexico users").

In *Nebraska v. Wyoming*, the Court recognized that, in its earlier decision in *Wyoming v. Colorado*, the “only showing of injury or threat of injury was the inadequacy of the supply of water to meet all appropriative rights.” 325 U.S. at 610. The Court explained that, “where there is not enough water in the river to satisfy the claims asserted against it, the situation is not basically different from that where two or more persons claim the right to the same parcel of land. The present claimants being States we think the clash of interests to be of that character and dignity which makes the controversy a justiciable one under our original jurisdiction.” *Id.*

It is sufficient, moreover, to prove that flows at certain times of the year are lacking, even if such flows may be sufficient at other times of the year. In *New Jersey v. New York* — a dispute between two Eastern riparian law States — the Court found threshold injury and issued an equitable apportionment decree based solely on anticipated harms from low river flows to (1) summer recreation, including reputational harms, and (2) summer oyster bed conditions. *See* 283 U.S. at 345-46; *see also* Report of the Special Master at 139-46, 159-76, *New Jersey v. New York*, No. 16, Orig. (Feb. 2, 1931). Likewise, the Court concluded that Nebraska had met her burden to show injury where “the dependable natural flow of the river during the irrigation season has long been over-appropriated.” *Nebraska v. Wyoming*, 325 U.S. at 608. Thus, the Court has made clear that select harms suffered only at certain times of the year will suffice to satisfy the downstream State’s threshold burden to prove injury from consumption in the upstream State, and therefore warrant an equitable apportionment.

2. North Carolina’s View of the Threshold Injury Standard Is Erroneous

North Carolina erroneously claims that South Carolina must meet a tort-like standard by showing that its injuries were “proximately caused” by actions of North Carolina.⁴ North Carolina also contends that South Carolina’s harm must be assessed against a presumption that all North Carolina uses are “reasonable” and that South Carolina must show that it could ameliorate any claimed harms by adjusting its own in-state consumption, conservation, and use of alternative water supplies. NC. 2008 Br. 6-7 (June 16, 2008); *see* SC Br. 15-17; SC Reply 2-4.

The Court, however, has never required the downstream State to meet a tort-like standard of proximate cause when proving injury. Injecting such a fault-based standard would unfairly presume, as an initial matter, that the upstream State had

⁴ *See* Defendant State of North Carolina’s Response to Plaintiff State of South Carolina’s First Set of Contention Interrogatories at 8 (June 4, 2010) (Ex. A hereto, excerpting response to Contention Interrogatory No. 1).

a greater right to or superior property interest in the waters of a shared river, so that the downstream State must look for additional water within its borders and among its users, before it may complain that the upstream State is profligate in its own water uses. Such an approach would squarely contravene the fundamental principle that each State has an “equality of right” to interstate waters. *Connecticut v. Massachusetts*, 282 U.S. at 670.⁵ See *supra* pp.4-5.

North Carolina also has asserted that the effects of “naturally occurring drought” must be excluded when assessing South Carolina’s harm. See Ex. A at 8; NC 2008 Br. 7. That claim, too, assumes that South Carolina must show some fault on the part of North Carolina and appears to be grounded on the premise that, because drought is an act of God, North Carolina did not cause it and therefore cannot be made to adjust its consumption in light of the effects of drought. But it also is true that South Carolina does not cause drought. Thus, the Court has considered drought to be a baseline factor in determining the total available water supply available to *both* States — not just the downstream State — as a matter of fundamental equity. In *Nebraska v. Wyoming*, the Court first determined the impact of an ongoing, 10-year drought and then found that the downstream State had proved injury because demand exceeded the available supply during that drought. See 325 U.S. at 621 (“On the basis of the conditions which have obtained since [inception of the ongoing drought in] 1930, it is plain that the natural flow of the river during the irrigation season has been over-appropriated.”). Accordingly, the Court concluded, “a controversy exists; and the decree which is entered must deal with conditions as they obtain today,” meaning “the dependable flow” during the drought. *Id.* at 620 (citing *Wyoming v. Colorado*, 259 U.S. at 476).

North Carolina has provided no authority for its plainly inequitable positions that impose the burden of addressing drought solely on the downstream State, although South Carolina’s contention interrogatories specifically requested North Carolina to provide the legal basis for those claims. See Ex. A at 6-10. This Court’s precedents have never placed the downstream State on an *unequal* footing with the upstream State.

Even if North Carolina and the intervenors were correct that South Carolina has a higher threshold burden to show injury — and they are not correct — a single proceeding still would be warranted. Their view of any Phase One is so expansive as to require much if not all of the equitable balancing that would occur in any Phase Two, thus obviating any putative efficiency gains from bifurcation. See SC

⁵ This foundational principle is necessarily grounded in the equal-footing doctrine, which provides that all States are equal vis-à-vis each other. See, e.g., *Escanaba & Lake Michigan Transp. Co. v. City of Chicago*, 107 U.S. 678, 689 (1883) (“Equality of constitutional right and power is the condition of all the states of the Union, old and new.”).

Br. 4-8, 11-21; SC Reply 1-4, 7-12. Accordingly, on any view of the governing legal standard, a single proceeding consisting of a single discovery period and a single trial will be the most effective and efficient means of bringing the certainty sought by South Carolina citizens concerning their future water needs.

3. South Carolina Will Demonstrate Threshold Injury

In response to contention interrogatories served by North Carolina, South Carolina provided a detailed and lengthy statement of the harms on which it plans to rely.⁶ That extensive response demonstrates South Carolina's high likelihood of satisfying its threshold burden, by showing the inadequacy of the water supply to meet all existing uses in South Carolina during times of low river flows. South Carolina has set out the harms to industrial and commercial users, water-based recreational users and businesses, and water utilities.

a. Evidence of past harms. Bowater Incorporated, which owns and operates the largest coated paper and market pulp mill in North America and employs approximately 1,000 people in South Carolina, was required to spend in excess of \$10 million to operate a tertiary treatment plant and on-site holding ponds for at least 49 months during the droughts of 1998-2002 and 2007-2009. *See* Ex. B at 9. At one point, Bowater's holding ponds were near capacity; had capacity been reached, Bowater might have had to curtail production and implement forced layoffs due to cessation of plant operations. *See id.* at 9-10. South Carolina Electric & Gas ("SCE&G") likewise had to construct an expensive upgrade to its plant, because it was at risk of having to "de-rate" its power plant and thus reduce power generation during low-flow periods. *See id.* at 10-11. Those upgrades cost more than \$65 million, with ongoing costs of \$500,000 per year to reduce the amount of water required from the Catawba River. *See id.*

South Carolina also has suffered sizable recreational harms caused by low lake levels requiring closure of numerous boat ramps. *See id.* at 13-18.⁷ In their expert reports, South Carolina's economists will value those harms to recreational users, which amounted in one period of several months to millions of dollars, and may have exceeded \$10 million, as a result of the cancellation of hundreds of thousands of recreational visits. *See id.* at 14. In addition, one Lake Wylie marina lost more than \$1 million in sales caused by the low lake levels during the most

⁶ *See* Plaintiff South Carolina's Responses to Defendant North Carolina's First Set of Contention Interrogatories at 7-26 (Apr. 2, 2010) (Ex. B hereto, excerpt containing response to Contention Interrogatory No. 1).

⁷ *See also* SC-007-0000002, -0000003, -0000006, -0000010, -0000012, -0000016, -0000017 (Ex. C hereto, containing illustrative photographs showing low lake levels at Lake Wylie and Lake Wateree).

recent drought in 2007-2009, and another had to spend approximately \$60,000 to repair damage to docks caused directly by low water levels. *See id.* at 15. Previously scheduled fishing tournaments also were cancelled or, in one case, moved instead to Lake Norman in North Carolina, causing additional significant harms to recreators and the local economy serving them. *See id.* at 15-16. Secondary effects on the regional economy and loss of lakeside property values account for millions of dollars more in economic harms caused by the low lake levels and also will be catalogued and valued by South Carolina's expert economists. *See id.* at 16-18. And the reputation of Lake Wylie for recreation also has suffered, further harming future economic prospects for the region. *See id.* at 13.

South Carolina's contention interrogatory responses set out additional significant harms to other water users. *See id.* at 7-19. In addition, South Carolina's hydrology experts will show that increases in consumptive water uses in North Carolina translate almost directly into decreased stream flow into South Carolina. *See id.* at 21. Moreover, during periods of low water supply, the relative proportion of the water supply that reaches South Carolina has diminished significantly and caused lake levels to drop to levels too low to sustain marine recreation. *See id.* at 21-22. At the same time, both North Carolina and Duke Energy officials repeatedly have warned that the Catawba River Basin is dangerously short on water in times of drought, thus necessitating reduced consumption — not unchecked increases in North Carolina's upstream water demands. *See id.* at 22-24.

b. Evidence of future harms. Those past harms are indicative of greater harms that South Carolina will suffer in the future. As South Carolina's hydrology experts will show, the Catawba River Basin could be on the brink of disaster when the next drought occurs — particularly if North Carolina continues to authorize interbasin transfers, which, by definition, are not returned to the Basin. Because North Carolina's population and water demands are expected to continue to grow, low-flow periods of the type experienced over the last decade will be exacerbated, likely making future shortages more frequent, more serious, and longer-lived. *See Ex. B at 24.*

South Carolina's experts also have determined that the future water-supply sequence used by Duke Energy, which is based on historical data used to make predictions with the CHEOPS model and formed the basis for the Comprehensive Relicensing Agreement ("CRA"), is not the most reliable indicator of potential future conditions and exaggerates the ability of future water supply to meet future demand. *See id.* at 25-26. Indeed, Duke has declined to incorporate in its modeling of future conditions the most recent historic drought of record, which occurred in 2007-2009 — just five years after the previous historic drought of record in 1998-2002. The projection offered by Duke Energy anticipated only four months of Low Inflow Protocol ("LIP") Stage 3 (just one stage below Stage 4 emergency conditions)

during the entire 51-year period of analysis, and even that short period was projected to occur only in the 49th year of the modeled period, when water withdrawals in North Carolina are projected to be more than twice current levels. *See id.* at 25. In fact, in 2007 and 2008, despite reductions in withdrawals from 2006 levels, Stage 3 LIP conditions were in place for *15 months*. *See id.* at 25-26. Thus, in just the first two years of the modeled 51-year period, Stage 3 has been experienced nearly four times as often as Duke had projected for the entire 51-year period. Moreover, invocation of any of the LIP's voluntary and required cutbacks in water use, by definition, means that South Carolina has been injured, as that concept is applied in equitable apportionment cases, because there is not enough water to meet all of South Carolina's existing demands.

South Carolina thus expects to show, through expert hydrological analyses, that future increases in withdrawal cannot be sustained during water-supply conditions such as those experienced by South Carolina in 2007 and 2008. As demand for water supply increases in the future, the ability to maintain both goals of minimum-flow targets and critical reservoir elevations will become increasingly difficult. *See id.* at 26. Neither the voluntary reductions nor the mandatory reductions called for under the LIP will be sufficient to reduce withdrawals from their increased levels to sustainable levels during periods of low water supply — and the LIP in no way limits North Carolina's current or future consumption, but rather takes it as a given. Therefore, under reasonably foreseeable growth conditions, the LIP will be unable to prevent the failure to meet both minimum-flow targets and critical reservoir elevations during low water-supply periods such as those experienced in 2007 and 2008. *See id.*

c. South Carolina will satisfy the Court's threshold injury standard. South Carolina's detailed responses to North Carolina's contention interrogatories set out injuries that clearly and convincingly show that the Catawba River is over-appropriated during times of low flows and that the claims to the river exceed the available supply. In all events, these documented harms easily will suffice to meet the Court's threshold harm standard, just as the harms to summer recreation and oyster farming met that standard and compelled an equitable apportionment in *New Jersey v. New York*. And, as in *Nebraska v. Wyoming* and *Wyoming v. Colorado*, the claims to the river exceed the available supply when flows get low in times of drought. *See also* SC Reply 13-15. Thus, because South Carolina in all likelihood will meet its threshold burden to show injury, the probability that bifurcation of the trial or discovery will provide efficiency gains is exceedingly low.

Even under North Carolina's proffered (and erroneous) inequitable harm standard, South Carolina would still meet its threshold burden. South Carolina will be able to demonstrate that it could not ameliorate its harms through less consumption in South Carolina and that less consumption in North Carolina would

ameliorate the harms sustained by South Carolina. Recent and expected future growth in North Carolina takes more and more water from longstanding South Carolina water uses. North Carolina's ever-increasing demands also include growth in areas outside the Catawba River Basin that North Carolina serves or seeks to serve with interbasin transfers. Because interbasin transfers, by definition, are never returned to the Catawba River Basin, they result in a 100% net consumptive use that seriously taxes the river in times of drought, when water is scarcest.

In addition, the Court has made clear that, in the subsequent equitable balancing, an upstream State seeking to take water away from existing downstream uses — as North Carolina does, through its recent and expected future growth — must show, clearly and convincingly, that the benefits of such new uses vastly outweigh existing uses, such that it is equitable to require such existing uses to be curtailed. *See Colorado v. New Mexico*, 467 U.S. 310, 317 (1984). No case from this Court has found that an upstream State has met that heavy burden. *See id.* at 317-23 (holding that Colorado failed that stringent test). Although this inquiry is not properly part of the downstream State's burden to show harm, it would become relevant if North Carolina's (erroneous) conception of the harm standard were adopted. Thus, once North Carolina begins to argue that South Carolina must ameliorate its harms through less consumption in South Carolina, South Carolina should be entitled to respond by asserting that North Carolina has a clear and convincing burden to justify its recent growth in water demands and interbasin transfers to the extent they take water away from existing South Carolina uses.

* * * * *

For the reasons set out here and in the prior briefing and oral argument, South Carolina respectfully submits that the Special Master should order this case conducted as a single proceeding for purposes of discovery as well as trial, save for one discrete issue that all agree is not relevant to South Carolina's threshold harm showing.

Respectfully submitted,



David C. Frederick
*Special Counsel to the
State of South Carolina*

cc: Current Service List

EXHIBIT A

IN THE
SUPREME COURT OF THE UNITED STATES

No. 138, Original

STATE OF SOUTH CAROLINA,
Plaintiff,

v.

STATE OF NORTH CAROLINA,
Defendant.

CATAWBA RIVER WATER SUPPLY PROJECT,
Defendant-Intervenor,

and

DUKE ENERGY OF THE CAROLINAS, LLC,
Defendant-Intervenor.

**Before the Special Master
Hon. Kristin L. Myles**

**DEFENDANT STATE OF NORTH CAROLINA'S RESPONSE TO
PLAINTIFF STATE OF SOUTH CAROLINA'S FIRST SET OF
CONTENTION INTERROGATORIES**

Pursuant to the Rules of the Supreme Court of the United States and the Case Management Plan (CMP) entered January 7, 2009 and the Federal Rules of Civil Procedure incorporated therein, Defendant State of North Carolina hereby responds to Plaintiff State of South Carolina's First Set of Contention Interrogatories to Defendant State of North Carolina (Contention Interrogatories) served May 4, 2010 as follows:

13. North Carolina's responses to the Contention Interrogatories are made solely for the purposes of this action. In providing these responses, North Carolina does not waive, but rather intends to preserve (a) all objections as to competence, relevancy, materiality, and admissibility; (b) all objections as to vagueness, ambiguity, and undue burden; and (c) all rights to object on any ground to the use of responses herein in any proceeding.

14. These General Objections are incorporated by reference into each and every response below to the extent applicable. Various objections may be specifically referred to in these responses for purposes of clarity. However, failure to incorporate specifically an objection should not be construed as a waiver of any such objection.

**SPECIFIC OBJECTIONS AND RESPONSES TO
PLAINTIFF STATE OF SOUTH CAROLINA'S FIRST SET OF
CONTENTION INTERROGATORIES**

Without waiving any of these General Objections, and subject to the additional objections interposed below, the State of North Carolina responds to each interrogatory separately below:

Contention Interrogatory No. 1:

What does North Carolina contend is South Carolina's threshold burden to show harm under the Court's equitable apportionment analysis? State all components of North Carolina's contention. If North Carolina contends that, as part of that showing, South Carolina must demonstrate that it could not ameliorate its harms by less upstream consumption in South Carolina, more conservation in South Carolina, and/or use of alternative water supplies in South Carolina, specify in detail the factual and legal basis for your contention. If North Carolina contends that South Carolina's harm is "self-inflicted" (NC Phase One Issues Br. 7 (June 16,

2008)) specify in detail the factual and legal basis for your contention. Finally, if North Carolina contends that, in the threshold harm analysis, any or all of North Carolina's uses must be deemed "reasonable" (*id.*), specify in detail the factual and legal basis for your contention.

Response to Contention Interrogatory No. 1:

Defendant North Carolina objects to this Contention Interrogatory insofar as it requests an answer to a purely legal issue. Defendant North Carolina further objects to this Contention Interrogatory on the ground that it is confusing and ambiguous as to the meaning of the phrases – "State all components of North Carolina's contention", "must be deemed reasonable", and "as part of that showing". In addition, the Contention Interrogatory is confusing insofar as it conflates the threshold burden with the factors required by the Court for an equitable apportionment analysis.

Defendant North Carolina also objects to this Contention Interrogatory because it requests North Carolina provide information regarding contentions relating to the cause of harms alleged by South Carolina. However, to date, South Carolina has not provided information identifying specific consumptive uses, or even a specific quantity of consumptive use, by North Carolina as the cause of the harms identified in the Bill of Complaint filed January 2007 or in South Carolina's Responses to North Carolina's First Set of Contention Interrogatories served April 2, 2010. Defendant North Carolina has requested South Carolina supplement its Responses to the Contention Interrogatories to identify the specific consumptive uses it claims cause it harm. *See* May 7, 2010 Correspondence to David Frederick

and Scott Attaway from James Gulick and Mary Lucasse. North Carolina has not yet received South Carolina's response to this request and objects to responding to this Contention Interrogatory until such time as South Carolina has identified the specific consumptive uses it claims cause it harm. Finally, discovery is ongoing. Defendant North Carolina reserves the right to supplement its response to this Contention Interrogatory.

Without waiving North Carolina's general or specific objections, Defendant North Carolina responds as follows: Supreme Court equitable apportionment cases require a downstream State to show by clear and convincing evidence that the upstream State has caused the downstream State real or substantial injury or damage as a threshold matter **before** the Court will decide an equitable apportionment of the river. E.g. *Colorado v. New Mexico*, 459 U.S. 176, 187-88 (1982); *Colorado v. New Mexico*, 467 U.S. 310, 317 (1984); *Nebraska v. Wyoming*, 515 U.S. 1, 8 (1995). Specifically,

The governing rule is that this Court will not exert its extraordinary power to control the conduct of one State at the suit of another, unless the threatened invasion of rights is of serious magnitude and established by clear and convincing evidence [and t]he burden on the [downstream State] to sustain the allegations on which it seeks to prevent [the upstream State] from making the proposed diversions is much greater than that generally required to be borne by one seeking an injunction in a suit between private parties.

Connecticut v. Massachusetts, 282 U.S. 660, 669 (1931) (citations omitted).

Defendant North Carolina has already set forth the law regarding South Carolina's threshold burden in various legal pleadings filed in this case. *See, e.g.*

Brief of the State of North Carolina in Opposition to Motion for Leave to File Bill of Complaint filed August 7, 2007 at 17-21; North Carolina's Brief Regarding Issues for Phase I filed June 16, 2008 at 2-8; North Carolina's Reply Brief Regarding Issues for Phase I filed June 23, 2008 at 4-8; Defendant North Carolina Brief in Support of Continued Bifurcation in the Litigation filed March 12, 2010 at 4-6; and North Carolina's Reply Brief in Support of Continued Bifurcation filed April 9, 2010 at 2-4. North Carolina specifically incorporates its previous briefing on the law of equitable apportionment in response to this Contention Interrogatory.

Consistent with the law, North Carolina contends that in order for South Carolina to meet its threshold burden it must provide 1) clear and convincing evidence of 2) specific consumptive uses, including but not limited to interbasin transfers (IBTs) or other actual diversions of the River, or actions by North Carolina 3) that cause 4) specific, substantial harm of a serious magnitude to South Carolina. See citations set forth in North Carolina's Brief Regarding Issues for Phase I filed June 16, 2008 at 2-8. In particular, South Carolina must demonstrate that the harms that it alleges are proximately caused by actions of North Carolina and not by naturally occurring drought or the actions of third parties over which North Carolina does not and cannot exercise control.

In this Contention Interrogatory, South Carolina also asks whether North Carolina contends that South Carolina must demonstrate that it could not ameliorate its harms by less upstream consumption within South Carolina, more

conservation in South Carolina, and/or use of alternative water supplies in South Carolina. North Carolina contends that as part of South Carolina's burden on causation, Plaintiff must show that the specific injuries Plaintiff attributes to consumption in North Carolina were not caused by drought or by South Carolina's own actions. *Missouri v. Illinois*, 200 U.S. 496, 522-26 (1906). "Drought" is defined in S.C. Code Ann. § 49-23-20 as a period of diminished precipitation which results in negative impacts upon the hydrology, agriculture, biota, energy, and the economy of the State. These are the very kinds of harm that South Carolina has alleged in its Bill of Complaint at ¶17 and in South Carolina's response to North Carolina's Contention Interrogatory No. 1. North Carolina contends that South Carolina, as the complaining State, must show that the cause of its harm is some specific use in North Carolina and not the drought or low flow in the River.

Similarly, in this Contention Interrogatory South Carolina asks whether North Carolina "contends that South Carolina's harm is 'self-inflicted.'" In answering this Contention Interrogatory, North Carolina asserts that South Carolina's harms identified to date are limited to those in the Bill of Complaint filed in January 2007 and those identified in South Carolina's Responses to North Carolina's First Set of Contention Interrogatories served April 2, 2010. Upon reviewing these submissions, North Carolina asserts that the South Carolina's alleged harms were caused in whole or in part, by dry regional conditions and/or elevated water temperatures, irrespective of consumptive uses in North Carolina.

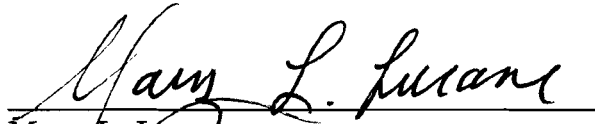
However, North Carolina also contends that such harms may be caused in part by 1) South Carolina's own authorized IBTs, to the extent that South Carolina can prove that IBTs cause harm, which North Carolina disputes; 2) South Carolina and/or its citizens failure to follow Duke Energy's low inflow protocols and drought response or cooperate in the development of a new regime for the operation of the dams on the Catawba River in order to diminish the impact of droughts in both States; 3) South Carolina's wastewater permitting process which unreasonably increases the effluent load in the River and allows corporations, such as Bowater Inc., South Carolina Electric & Gas, Invista, and other corporations not yet identified by South Carolina, to use the Catawba River for their own economic benefit instead of requiring the companies to use efficient production or wastewater treatment methods to preserve and protect the River; and 4) such other self-inflicted harms not yet discovered.

Contention Interrogatory No. 2:

Does North Carolina contend that, in considering whether to approve an interbasin transfer from the Catawba River Basin, it considers the needs of, and effects on, South Carolina? If the answer is yes, specify in detail the factual and legal basis for your contention, including but not limited to identification of any statutory, regulatory, or other law, and explain in detail what legal status, if any, the views of South Carolina are or would be given in North Carolina's decision whether or not to grant an interbasin transfer in the Catawba River Basin. If the answer is no, explain in detail the specific factual and legal bases that North Carolina contends authorize North Carolina not to take into account the downstream effects of withdrawals and interbasin transfers on South Carolina's water users.

appropriate, the terms of any such decree, and whether any previously issued decree should be amended or modified. North Carolina notes that prior precedents indicate that the Court will modify a previously issued decree in an original action based on changed circumstances.

ROY COOPER
North Carolina Attorney General
Christopher G. Browning, Jr.*
Solicitor General of North Carolina
James C. Gulick
Senior Deputy Attorney General
J. Allen Jernigan
Special Deputy Attorney General
Marc D. Bernstein
Special Deputy Attorney General
Jennie W. Hauser
Special Deputy Attorney General


Mary L. Lucasse
Special Deputy Attorney General

NORTH CAROLINA DEPARTMENT OF JUSTICE
Post Office Box 629
Raleigh, NC 27609-0629
Phone: (919) 716-6900
Fax: (919) 716-6763

Counsel for the State of North Carolina
*Counsel of Record

June 4, 2010

STATE OF NORTH CAROLINA

VERIFICATION

COUNTY OF WAKE

I, Thomas C. Fransen, in my capacity as Deputy Director of the North Carolina Department of Environment and Natural Resources, Division of Water Resources and on behalf of the State of North Carolina in South Carolina v. North Carolina, No. 138, Original, being first duly sworn, deposes and says that I have read the foregoing responses and that I am authorized to make this Verification on behalf of the State of North Carolina; that the knowledge and information required to make this verification has been accumulated and is not available from a single individual; and that the statements set forth in **Defendant State Of North Carolina's Response To Plaintiff State Of South Carolina's First Set Of Contention Interrogatories** are true and correct to the best of my knowledge and belief.

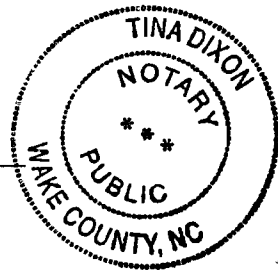
Thomas C. Fransen

Subscribed and sworn to before me
this 4th day of JUNE, 2010.

(Sign) *Tina Dixon*
(Print) Tina Dixon

, Notary Public


(Official Seal)
My Commission Expires: 08/20/2011



CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this day served, upon all counsel required to be served, **DEFENDANT STATE OF NORTH CAROLINA'S RESPONSE TO PLAINTIFF STATE OF SOUTH CAROLINA'S FIRST SET OF CONTENTION INTERROGATORIES** by e-mailing and depositing the number of copies required on the service list in the United States Mail with first class postage pre-paid properly addressed to counsel set forth on the attached service list.

ROY COOPER
North Carolina Attorney General
Christopher G. Browning, Jr.*
Solicitor General of North Carolina
James C. Gulick
Senior Deputy Attorney General
J. Allen Jernigan
Special Deputy Attorney General
Marc D. Bernstein
Special Deputy Attorney General
Jennie W. Hauser
Special Deputy Attorney General



Mary L. Lucasse
Special Deputy Attorney General

NORTH CAROLINA DEPARTMENT OF JUSTICE
Post Office Box 629
Raleigh, NC 27609-0629
Phone: (919) 716-6900
Fax: (919) 716-6763
Counsel for the State of North Carolina

* Counsel of Record

June 4, 2010

SERVICE LIST

Counsel for the State of South Carolina

David C. Frederick (3 copies + email pdf)	Henry D. McMaster (3 copies + email pdf)
Rebecca A. Beynon	<i>Attorney General</i>
Scott H. Angstreich	John W. McIntosh
Scott K. Attaway	<i>Chief Deputy Attorney General</i>
Michael K. Gottlieb	Robert D. Cook
KELLOGG HUBER HANSEN	<i>Asst. Deputy Attorney General</i>
TODD EVANS & FIGEL PLLC	T. Parkin Hunter
1615 M Street, NW	<i>Asst. Attorney General</i>
Suite 400	Office of the Attorney General
Washington, DC 20036	State of South Carolina
Phone: (202) 326-7951	P.O. Box 11549 (29211)
Fax: (202) 326-7999	1000 Assembly St., Suite 519
rbeynon@khhte.com	Columbia, SC 29201
sangstreich@khhte.com	Phone: (803) 734-3736
sattaway@khhte.com	Fax: (803) 734-3524
mgottlieb@khhte.com	agrcook@ag.state.sc.us
	phunter@ag.state.sc.us

Counsel for Duke Energy Carolinas, LLC

Carter G. Phillips (4 copies + email pdf)	Garry S. Rice (3 copies + email pdf)
Virginia A. Seitz	Timika Shafeek-Horton
Roger R. Martella	<i>Associate General Counsel</i>
James W. Coleman	Duke Energy Corp.
SIDLEY AUSTIN LLP	Legal Affairs-EC03T
1501 K Street, N.W.	P.O. Box 1006 (28201)
Washington, D.C. 20005	526 South Church Street
Phone: (202) 736-8270	Charlotte, NC 28202
Fax: (202) 736-8711	Phone: (704) 382-8111
cphillips@sidley.com	Fax: (980) 373-9903
vseitz@sidley.com	garry.rice@duke-energy.com
rmartella@sidley.com	timika.shafeek-horton@duke-energy.com
jcoleman@sidley.com	

Counsel for Catawba River Supply Project

Thomas C. Goldstein (3 copies + email pdf)
Troy Cahill
AKIN GUMP STRAUSS HAUER & FELD, LLP
Robert S. Strauss Bldg.
1333 New Hampshire Ave., NW
Washington, DC 20036-1564
Phone: (202) 887-4000
Fax: (202) 887-4288
tgoldstein@akingump.com
tcahill@akingump.com

James W. Sheedy (3 copies + email pdf)
Susan E. Driscoll
DRISCOLL SHEEDY, PA
11520 North Community House Road
Building 2, Suite 200
Charlotte, NC 28277
Phone: (704) 341-2101
Fax: (704) 341-2105
jimsheedy@driscollsheedy.com
sdriscoll@driscollsheedy.com

Counsel for City of Charlotte

James T. Banks (3 copies + email pdf)
H. Christopher Bartolomucci
Audrey G. Moog
Adam J. Siegel
HOGAN & HARTSON, L.L.P.
555 Thirteenth Street, N.W.
Washington, D.C. 20004
Phone: (202) 637-5600
Fax: (202) 637-5910
jtbanks@hhlaw.com
hcbartolomucci@hhlaw.com
amoog@hhlaw.com
ajsiegel@hhlaw.com

Parker D. Thomson (1 copy + email pdf)
HOGAN & HARTSON, L.L.P.
1111 Brickell Ave., Suite 1900
Miami, FL 33131
Phone: (305) 459-6613
Fax: (305) 459-6550
pdthomson@hhlaw.com

DeWitt F. McCarley (3 copies + email pdf)
City Attorney
Office of City Attorney
600 East Fourth Street
Charlotte, North Carolina 28202
Phone: (704) 336-2254
Fax: (704) 632-8328
dmccarley@ci.charlotte.nc.us

H. Michael Boyd (1 copy + email pdf)
Senior Assistant City Attorney
Charlotte-Mecklenburg Utilities
5100 Brookshire Boulevard
Charlotte, NC 28216
Phone: (704) 391-5110
Fax: (704) 632-8336
hmboyd@ci.charlotte.nc.us

EXHIBIT B

IN THE
SUPREME COURT OF THE UNITED STATES

No. 138, Original

STATE OF SOUTH CAROLINA,
Plaintiff,

v.

STATE OF NORTH CAROLINA,
Defendant.

**Before the Special Master
Hon. Kristin L. Myles**

**PLAINTIFF SOUTH CAROLINA’S RESPONSES TO
DEFENDANT NORTH CAROLINA’S
FIRST SET OF CONTENTION INTERROGATORIES**

Pursuant to the Rules of the Supreme Court of the United States and the Case Management Plan (“CMP”) (adopted in Case Management Order No. 9 (Jan. 7, 2009)) submitted by the party States to the Special Master, including the Federal Rules of Civil Procedure as incorporated therein, Plaintiff South Carolina hereby responds to Defendant North Carolina’s First Set of Contention Interrogatories (Feb. 23, 2010) (“Contention Interrogatories”) as follows:

GENERAL OBJECTIONS

The following General Objections apply to each and every contention interrogatory and form an integral part of South Carolina’s response to each contention interrogatory:

**SPECIFIC OBJECTIONS AND RESPONSES
TO THE CONTENTION INTERROGATORIES**

Subject to the foregoing General Objections, which are incorporated into each and every one of the following responses, South Carolina responds to the Contention Interrogatories as follows:

Contention Interrogatory No. 1: What do you contend are the substantial harms to South Carolina caused by uses of the Catawba River in North Carolina which are sufficient to satisfy South Carolina's threshold burden of proving substantial injury? State all facts and identify all evidence supporting South Carolina's contention. In your answer, identify with specificity each harm of which South Carolina complains in the Litigation. In identifying each harm, please include a description of the nature, type, and extent of harm; the location of the harm; the time the harm occurred; the length and duration of the harm; and such other details as are necessary to assess the claim of injury.

Response to Contention Interrogatory No. 1: South Carolina objects to this Contention Interrogatory to the extent that it calls for expert opinion and testimony that is still being developed and to the extent that it calls for early identification of the specific evidence on which South Carolina may rely. Discovery and South Carolina's investigation of the facts are ongoing, and South Carolina reserves the right to supplement its response to this Contention Interrogatory. South Carolina will provide expert reports addressing these matters in greater detail consistent with the scheduling order entered in this case and identifying the evidence underlying those reports.

Subject to and without waiving South Carolina's general and specific objections, South Carolina identifies the following harms based on South Carolina's current understanding of the relevant facts. South Carolina's experts continue to analyze the available data, upon which their reports will be based,

and South Carolina reserves the right to supplement this response as the case progresses.

At the outset, it is important to note that South Carolina has sustained injury from significant periods of low flow from the Catawba River Basin in the past decade, which North Carolina's interbasin transfers from that Basin exacerbate. As the Catawba Riverkeeper noted in her affidavit attached to South Carolina's Complaint, "the Catawba River has reached its threshold for sustainable use" and thus "[a]ll interbasin transfers authorized by the State of North Carolina . . . that transfer water out of the Catawba River . . . impact and injure the State of South Carolina." Affidavit of Donna Lisenby ¶¶ 25-26 (May 30, 2007) (S.C. App. 41-42). The specific injuries documented below are manifestations of the harms that interbasin transfers and other consumptive uses inflict at a time when the Catawba River has reached its threshold of use.

A. Harms to Industrial and Commercial Users

South Carolina's existing industrial entities rely both directly and indirectly on the Catawba River system for the water they require as inputs to operate their businesses. These industrial entities have directly experienced added costs to obtain alternative sources of water, pay higher rates for existing water supplies, implement water-saving process changes or water recycling, or upgrade effluent discharge methods to reflect reduced assimilative capacity in receiving waters. Secondary economic impacts of these harms indirectly affect the regional economy (e.g., output, employment, and tax receipts).

A lack of reliable water availability has harmed South Carolina enterprises in the past and will continue to harm them in the future by creating additional costs (e.g., to obtain alternative sources of water, implement water-saving process changes or water recycling), production losses, and layoffs. The lack of reliable water availability also affects potential future business expansions and relocations to the Catawba River Basin in South Carolina. The following entities have suffered direct harms from low flows on the Catawba River.

Bowater Incorporated. As set out in the affidavit of Dale Herendeen, attached to South Carolina's Complaint, Bowater owns the largest coated paper and market pulp mill in North America and employs approximately 1,000 people. Bowater experienced low flows during the drought of 1998-2002 that severely reduced the assimilative capacity of the Catawba River. As a result, Bowater had to utilize a tertiary treatment plant using on-site holding ponds at a cost of thousands of dollars per day for chemicals used to treat its wastewater discharge, which would have been unnecessary had the flows in the River been sufficient. During the 1998-2002 drought, Bowater operated the tertiary treatment plant for 42 months at a chemical cost of approximately \$7.5 million for the chemicals used, plus associated labor and power costs. By late 2002, the holding pond was close to capacity. Had capacity been reached, Bowater might have had to curtail production, which likely would have caused significant financial loss to Bowater and forced layoffs due to the cessation of plant

operations. During the subsequent 2007-2009 drought, Bowater operated its tertiary treatment plant for 7 months at 50% of capacity, at a cost of approximately \$3.5 million, plus associated labor and power costs. In addition, Bowater incurred capital costs to upgrade its tertiary treatment plant.

South Carolina Electric & Gas. South Carolina Electric & Gas (“SCE&G”) operates a coal-fired power generation plant located below Wateree Dam in Eastover, South Carolina, producing approximately 4.5 million megawatts per year and employing more than 100 people. SCE&G depends on the Catawba River, known as the Wateree River in South Carolina at the SCE&G plant, for water to cool its power plant. The ability to extract sufficient quantities of water (at suitably cool temperatures) is essential to operating its power generation facilities. Originally configured as a “once-through cooling” system, the facility returned the cooling water to the Wateree River in accordance with wastewater discharge permits from the National Pollutant Discharge Elimination System (“NPDES”) that limit effluent temperature to ensure that in-stream waters stay below critical heat levels within a specified distance downstream of the discharge point. Low flows in the Wateree River reduce the capacity of the Wateree River to receive cooling water from the plant and stay within the temperature tolerances required by the NPDES permit. SCE&G had often suffered periods of low flow during summer months, particularly during the drought of 1998-2002, and those reduced in-stream flows

elevated the temperatures of the River at the intake and discharge points for the SCE&G facility.

To ensure a continuing ability to operate its power generation facility — especially during summer periods when air and water temperatures are at their highest, and the demand for and value of power generation from the facility is also at its greatest — SCE&G made a considerable investment to convert from once-through cooling to closed-cycle cooling at its coal-fired Wateree power plant at a one-time cost of \$67 million, plus \$500,000 per year in additional costs for chemicals used in that new cooling system. This conversion significantly reduces the amount of water that the facility needs to withdraw from the River and eliminates the discharge of thermally impacted wastewaters into the River. Had SCE&G not installed that upgrade, it likely would have had to de-rate its power plant and thus reduce power generation during the subsequent drought of 2007-2009. The costly upgrade enabled SCE&G to avoid reducing power production in the region in times when electricity was in highest demand and costing SCE&G considerable revenues and profits by curtailing its ability to generate and sell electricity at peak prices.

Invista. Invista's nylon manufacturing facility, located in the City of Camden below Lake Wateree, is highly dependent on Wateree River levels being consistently high enough to support its extractive water needs. The facility operates with four river intakes, and pump cavitation (air intake) problems were evident in some low-flow periods, nearly resulting in the need to curtail plant

production in 2006. As a consequence, Invista acquired a portable pumping system that it uses periodically to draw water from lower levels of the Catawba River, when needed. The portable pumping equipment costs \$4,000 per month to rent (per pump) and also results in additional operation and maintenance costs.

Greenscape Businesses. Other commercial users affected by low water supply in the 1998-2002 and 2007-2009 droughts include sod and lawn service providers, nurseries, and related greenscape businesses that rely on selling, installing, and/or maintaining lawns, shrubs, and other landscapes at residential and commercial properties. Water-use restrictions on outdoor irrigation — as associated with Low Inflow Protocols (“LIP”) at Stages 2 and above — have cut into sales and maintenance revenues for these businesses, because their customers must reduce their landscape irrigation. The landscaping and nursery business sector accounts for millions of dollars in annual payroll in the Catawba River Basin.

South Carolina’s experts continue to analyze the available data, upon which their reports will be based. One illustrative example is Rolling Hills Nursery and Landscaping, Inc., located in Rock Hill, South Carolina, which reportedly has seen revenues decline by hundreds of thousands of dollars and the number of employees drop precipitously as a result of the low-flow periods experienced in the Catawba River Basin.

In all events, interbasin transfers and consumptive uses in North Carolina — including those to be increased or authorized in the future — will continue to exacerbate the harms suffered by South Carolina in periods of low flow and create uncertainties for persons and entities reliant on a steady flow of water from the Catawba River Basin.

Future Economic Development. Water limitations, or reductions in the perceived reliability of local water resources, are a significant deterrent to potential future business expansions and can prompt consideration of relocation out of the region by entities currently operating in the area. Water issues affect decisions by businesses considering locating new facilities in the region and can affect the determination to locate in an area with more reliable water resource conditions.

B. Harms to Water-Based Recreation and Businesses, and Secondary Impacts

When lake levels decline, those using the lake for recreation, and those operating water-related businesses, have suffered, and will continue to suffer, significant harms.

Recreational Harms. Recreational harms are the values lost when a recreational user is unable to derive his or her full utility (i.e., enjoyment) from a recreational outing or is restricted from taking a recreational trip at all. Low water levels in Lake Wylie have exposed hazards such as rocks, sand bars, or debris that can increase safety concerns, cause delays, and reduce the aesthetic appeal of lake water levels and water quality. All of these factors can adversely

affect the quality of recreational outings. During drought conditions, some access areas such as boat ramps and docks can become subject to closure, precluding recreators from accessing the resource as they normally would. In cases of facility or access area closure, the quantity of trips that recreators take is decreased, and recreators lose the value of an outing they would have taken if not for conditions caused by low flows.

The value of outings taken by recreators who participate in water-based or near-water activities can be affected by low water levels, either through a decrease in trip quality or through lost recreational outings. Duke Energy's REC-01 Study Report submitted with its re-licensing application to FERC contains survey data concerning the number of visits to public boat ramps on a monthly basis from January through December 2004. In 2007, many if not all public access boat ramps were closed from approximately August 2007 through at least the end of that year.

South Carolina's experts expect to show, for example, that economic harms to recreational users on the South Carolina portion of Lake Wylie during the period from approximately August 2007 through February 2008 — during which time the lake levels dropped below critical boating levels — amounted to hundreds of thousands of recreational visits and losses that may exceed \$10 million dollars. We believe that similar harms also were suffered at times during the 1998-2002 drought, including when reservoir levels at Lake Wylie likewise dropped below the critical boating elevation from approximately

October-December 2001 and August-September 2002. In the future, South Carolina and its experts also will investigate similar recreational harms suffered below Lake Wylie. South Carolina, concurrently with these responses, is producing a CD with illustrative photographs showing low lake levels at Lake Wylie and Lake Wateree, which are Bates stamped SC-007-0000001 - SC-007-0000018.

Harms to Water-Related Businesses. Although South Carolina's investigation is ongoing, we understand that Lake Wylie Marina, located on Lake Wylie, lost more than \$1 million in sales caused by the low lake levels during the most recent drought in 2007-2009. Low lake levels also precluded access to boatable-depth waters from most of the slips rented by the marina to boat owners. The impacts to Lake Wylie Marina during the drought of 1998-2002 are set out in the affidavit of Laron A. Bunch, Jr., attached to South Carolina's Complaint (at App. 22-24).

Following the drought of 1998-2002, River Hills Marina in Tega Cay had refurbished its docks in or around 2003 at a cost of approximately \$125,000. In 2007, when lake levels dropped significantly, River Hills had to pay approximately \$60,000 more for structural repairs caused directly by the drop in water levels, which should have been unnecessary for such a recently refurbished dock.

Low water levels have harmed South Carolina's sport fishing industry in the area. For example, in the fall of 2002, stream flows running at 5% to 15% of

normal caused Duke Energy to shut down boat ramps at Lake Wylie for safety reasons, which forced at least one fishing tournament, sponsored by the Fishers of Men and expected to draw 350 anglers, to be relocated to Lake Norman in North Carolina, where boat ramps remained open. York County lost an estimated amount of at least \$200,000 as a result of the tournament's transfer out of Lake Wylie to Lake Norman, where Lake Norman businesses benefited from the relocation. More recently, the South Carolina Wildlife Federation 5th Annual Bass Fishing Tournament scheduled to be held on October 27, 2007, was cancelled due to low water levels in Lake Wateree. It was rescheduled more than a year and a half later in June 2009.

Secondary Economic Impacts on the Regional Economy. The primary economic impacts described above ripple through the local economy and create secondary impacts in other portions of the regional economy, as well as the state economy. For example, a marina owner or employee who loses sizable earnings because of declining boat sales will tend to spend less on other local goods and services (e.g., purchases for home maintenance or improvements, entertainment, or automobiles). This reduced spending in turn reduces revenues, incomes, and employment opportunities at other local businesses and also adversely affects state and local tax receipts.

South Carolina's experts are estimating those secondary economic impacts using one or more commonly used regional "input output models" such as RIMS (developed by the federal Bureau of Economic Analysis), IMPLAN (developed by

the U.S. Forest Service), and REMI (developed and provided by a private vendor). These models translate the primary impacts (i.e., the estimated earnings decline, meaning the original decline in retail sales) into regional estimates of employment and output impacts (lost jobs and total economic loss, respectively, as generated by how the decline in original retail sales works its way through the regional economy).

Although South Carolina's experts have yet to conduct these analyses in full, preliminary estimates indicate that even a 10% decline in recreational use and expenditures in the region in a given year or boating season caused by low water levels results in secondary harms that include the loss of jobs and a decline in economic output of millions of dollars.

Declines in Property Values. Lakefront residential properties along Lake Wylie in South Carolina derive value, in part, from a variety of services provided by the lake. These services include recreational opportunities, aesthetics, and nature viewing, to name a few. The values of these services are capitalized into housing prices. Residential property values for shoreline properties along the South Carolina portion of Lake Wylie reflect a total investment having a combined asset value in the hundreds of millions of dollars

When water levels decline below typically observed past levels, the flow of the valuable lake-related services to properties along Lake Wylie is disrupted and property values are likely to be adversely affected. Potential impacts from reduced water flows and levels include aesthetic impairments and reduced

recreational access for lakeside property owners. For example, reduced water levels in Lake Wylie can leave behind sunken beaches and expose “bathtub rings.” Moreover, boat ramps and docks at lakeshore residential properties that once served the water’s edge may no longer offer direct access to the water. Many property owners and visiting recreators observed these impacts on Lake Wylie during the droughts of 1998-2002 and 2007-2009. South Carolina’s experts anticipate estimating the economic effects of low reservoir levels on lake-related property values, which may amount to millions of dollars.

C. Public Water Supplies

South Carolina’s water utilities in the Catawba River Basin have suffered, and are likely in the future to suffer, some revenue reductions when water-use restrictions are imposed during Low Inflow Protocol stages of two or higher and where wastewater rates are based on potable water-use amounts (as is typically the case). South Carolina understands that there were water-revenue impacts for many South Carolina water utilities in the Catawba River Basin from the 2007-2009 drought due to water-use restrictions. Every utility contacted thus far has experienced a decrease in revenue per tap during one or both of the recent years during which drought was declared and the LIP invoked throughout the irrigation season in 2007 and 2008. Some utilities also indicate decreased per-tap revenues for 2009 as well, during which time residents have likely continued to conserve water.

Water utilities also are forced to spend more on water treatment during periods of low flow in order to address water-quality issues. As lake levels decrease, sunlight is able to reach the bottom of the lake in more areas. The resulting stagnant water and the increased sunlight to the bottom promote the growth of algae, which produces a chemical called MIB (methylisoborneol) and which is responsible for a “muddy” or “dirty” taste in drinking water. One solution is to add Powdered Activated Carbon (“PAC”) to the water. We understand that the Lugoff-Elgin Water Authority incurred increased treatment costs of \$4,100 per week for PAC use at times during the 2007-2009 drought-induced algae bloom. Lugoff-Elgin continued increased use of PAC into the winter months during the 2007-2009 drought period. We also understand that the Camden Water Utility experienced increased carbon costs totaling \$1,835 from August 2008 through October 2009.

The increased use of chemicals results in a larger production of sludge, which must be removed from storage lagoons periodically. That expensive process requires dredging and dewatering. The dewatered solids are then transported to a landfill. Utilities therefore require additional sludge removal and dewatering as a result of the drought. For Lugoff-Elgin Water Authority, instead of requiring the process after only four years as expected, the process was needed after three years. The costs of accelerating that process for Lugoff-Elgin appear to be in the tens of thousands of dollars.

Some utilities have incurred extra costs during drought response. Communicating in a timely fashion with customers about water-use restrictions in response to low flows is essential to meeting LIP obligations to cut water use. Some utilities have incurred significant costs to ensure that customers understand water-use restrictions. For example, Camden Water Utility experienced low-flow-related mailing costs totaling \$13,500 for 2007 and 2008 combined. The City of Rock Hill hired a temporary worker for 1.5 years to help deal with the administrative burden associated with the recent drought, including coordinating public notices and public communication, tracking variance requests, and other duties.

In addition, water utility customers may have borne the harm of having their residential or commercial landscaping damaged or lost due to water-use restrictions. This results in added costs to replace lost plantings and a loss of aesthetics and perhaps property values. Over potentially prolonged periods of future water-use restrictions, the loss of trees, shrubs, gardens, and lawns across impacted portions of South Carolina could be substantial.

D. Water-Quality Harms

South Carolina's experts are in the process of analyzing the effects of increased upstream water uses and low-flow conditions on water quality in the Catawba River system. Water-quality harms during low-flow conditions may include degraded ambient water-quality conditions, impacts to aquatic ecosystems, and impacts to federally listed (e.g., threatened, endangered) or

other special status species. South Carolina reserves the right subsequently to supplement this response.

E. Historical Water Conditions

South Carolina's experts are engaged in extensive analysis of the historical water conditions in the Catawba River Basin. They have determined that the frequency of occurrence of stream flows from North Carolina into South Carolina that are less than 1,100 cubic feet per second ("cfs") has been increasing over time commensurate with increased water use in the Basin and that the number of days with flows below 1,100 cfs increased from 109 in 1999 to 228 in 2002 (during the 1998-2002 drought) and from 150 in 2007 to 244 in 2008 (during the 2007-2009 drought).

Increases in consumptive water use in North Carolina translate almost directly into decreased stream flow from North Carolina into South Carolina. Interbasin transfers — which by definition are not returned to the source basin — exacerbate decreased flows in the Catawba River Basin. Therefore, during periods of low water supply, the relative proportion of the water supply that reliably reaches South Carolina diminishes significantly. For example, during most years, approximately 70% of the inflow above Lake Wylie passes into South Carolina. During the 1998-2002 drought, however, that ratio had diminished to less than 50% in 2001 and 2002, and stream flows into South Carolina decreased to historical lows — in December 2001, the average monthly stream flow was less than 600 cfs. During the 2007-2009 drought, stream flows also decreased to

near historical lows, but were maintained above LIP minimum-flow requirements by the depletion of upstream reservoir storage.

That depletion of reservoir storage, however, dropped below or nearly reached the various critical conditions in 2007, for example, when the reservoir elevation in Lake Wylie dropped to 562.2 feet in October and averaged less than 562.5 feet in November. (The critical elevation on Lake Wylie is 564.9 for boating access, 562 feet for industrial intakes, and 561.4 feet for municipal intakes.) Thus, the combination of low water supply in 2007-2009 and increased withdrawals in North Carolina put reservoir conditions on the brink of failure to maintain both minimum-flow requirements and critical reservoir elevations under the provisional LIP implemented at the time.

North Carolina and Duke Energy officials, moreover, have repeatedly warned that the Basin was dangerously short on water, thus highlighting the fact that the Basin could easily be on the brink of disaster during times of drought. *See, e.g.,* Bruce Henderson, *What Now for Catawba River? Expert Suggests Bi-State ‘Orchestration’ to Control Essential Water Resource*, Charlotte Observer, Sept. 19, 2002, at 1B (“Water systems, power plants and recreational users all compete for a piece of the Catawba, said John Morris, director of the N.C. Division of Water Resources. New homes, roads and businesses will affect water quality. ‘At some point, the aggregate of this is going to become a problem, even if everybody is doing the right thing,’ Morris told the Bi-State Catawba River Conference at UNC Charlotte. . . . Morris suggested the

Catawba region consider ‘new institutions’ such as the federally authorized interstate compacts set up among other states that share rivers.”); Bruce Henderson & Christopher D. Kirkpatrick, Mayor: Duke Job No Conflict in Drought: *Tougher Water Limits Predicted: Duke Says Severest Restrictions Likely to Start in 3 to 6 Weeks*, Charlotte Observer, Oct. 24, 2007, at 1A (“Duke’s prognosis: Stage 4 drought status by mid-November to early December if no substantial rain falls. At that point, says the Catawba drought-response plan, usable storage in the reservoirs ‘can be fully depleted in a matter of weeks or months.’”); Christopher D. Kirkpatrick, *At Least 18 Inches of Rain Needed: Drizzle Doesn’t Dent Drought; Lakes at New Low Duke – Declares Situation Stage 3 Throughout Region as Basin Dwindles*, Charlotte Observer, Oct. 5, 2007, at 1A (“Duke said usable water in the basin was at 42 percent, far below the normal 70 percent or more expected this time of year. The water supply in the basin has been shrinking 2 percent to 3 percent a week, Duke said.”); Bruce Henderson, *Duke Power Warns Towns in Charlotte, N.C., Area to Cut Water Use*, Charlotte Observer, Aug. 28, 2002 (“Duke painted a bleak picture of current conditions on its lakes. More water is leaving the Catawba system, through water intakes, than is entering it from streams and rainfall. Most streams feeding the lakes are flowing at 5 percent to 15 percent of normal. The ground under the lakes is so dry that Duke officials say groundwater is flowing the wrong way, further depleting the lakes. . . . ‘We’re talking about a groundwater

table that's dropping out from under us as we talk,' said Bill Stroud, Duke's hydro operations chief.”).

F. Imminent Future Harms

The past harms described above are indicative of the greater harms that South Carolina will suffer in the future when similar low-flow conditions return to the Catawba River Basin — and such conditions could occur at any time, and without warning — particularly if North Carolina continues to authorize interbasin transfers, which remove 100% of the water withdrawn from the Catawba River Basin. Because North Carolina's population and water demands are expected to continue growing rapidly, including but not limited to further requests for interbasin transfers, low-flow periods of the sort experienced over the last decade will be exacerbated, even during times when drought-induced flow levels are above those documented in the two worst droughts on record. The expected increases in upstream consumption and population growth in North Carolina will make future shortages more frequent, more serious, and longer-lived.

South Carolina's expert hydrologist will incorporate *both* of the recent droughts in the historical study period used to generate his expert report, in which South Carolina will show that the probabilities of future periods of low flows make imminent harm to the State of South Carolina likely in the absence of an equitable apportionment requiring North Carolina to reduce its consumption and interbasin transfers during times of low water flows. Low-flow

periods have been, and will continue to be, caused or exacerbated by interbasin transfers that have been authorized or are anticipated to be authorized by North Carolina.

At present, South Carolina's experts have determined that the future water supply sequence used by Duke Energy, which is based on historical data used to make predictions with the CHEOPS model and formed the basis for the Comprehensive Relicensing Agreement ("CRA"), is not a reliable indicator of potential future conditions and exaggerates the ability of future water supply to meet future demand. Additionally, the water-supply sequence projected by Duke's modeling, which is based on the assumption that the future will exactly replicate the past, fails to include any significant drought until the 45th year of the sequence.

Furthermore, the projections offered by Duke Energy of the future occurrence of LIP stages have proven unreliable based on the experience during the 2007-2009 drought period. The projection offered by Duke Energy anticipated only four months of Stage 3 LIP during the entire 51-year period of analysis, and even that short period was projected to occur only in the 49th year of the modeled period, when water withdrawals in North Carolina were projected to be more than twice current levels.

In fact, in 2007 and 2008, despite *reductions* in withdrawals from 2006 levels, Stage 3 LIP conditions were in place for 15 months. Our experts believe that their analysis will clearly demonstrate that future increases in withdrawal

cannot be sustained during water-supply conditions such as those experienced by South Carolina in 2007 and 2008. As demand for water supply increases in the future, the ability to maintain both goals of minimum-flow targets and critical reservoir elevations will become increasingly difficult. Neither the voluntary reductions nor the mandatory reductions called for under the LIP will be sufficient to reduce withdrawals from their increased levels to sustainable levels during periods of low water supply. Therefore, under reasonably foreseeable growth conditions, the LIP will be unable to prevent the failure to meet both minimum-flow targets and critical reservoir elevations during low water-supply periods such as those experienced in 2007 and 2008.

Contention Interrogatory No. 2: For each harm identified in response to the immediately preceding Contention Interrogatory No. 1, or in response to North Carolina's Interrogatory No. 1 served on July 1, 2008, state whether South Carolina contends that such harm is limited to periods of "Drought". To the extent that South Carolina contends it suffers substantial harms during conditions or periods other than "Drought", please state all facts and identify all evidence supporting the specific conditions (e.g., flow parameters) that South [sic] contends give rise to such harms and state all facts and identify all evidence regarding the manner in which South Carolina determined that harm occurs during those specific conditions.

Response to Contention Interrogatory No. 2: South Carolina objects to this Contention Interrogatory to the extent that it is premature because discovery in this matter is ongoing and all facts that support South Carolina's claims against North Carolina may not be known by South Carolina at this time. South Carolina further objects to this Contention Interrogatory to the extent that it calls for expert opinion and testimony that is still being developed.

DAVID C. FREDERICK
SCOTT H. ANGSTREICH
SCOTT K. ATTAWAY
MICHAEL K. GOTTLIEB
KELLOGG, HUBER, HANSEN,
TODD, EVANS & FIGEL, P.L.L.C.
1615 M Street, N.W., Suite 400
Washington, D.C. 20036
(202) 326-7900

*Special Counsel to the
State of South Carolina*

April 2, 2010


HENRY DARGAN McMASTER

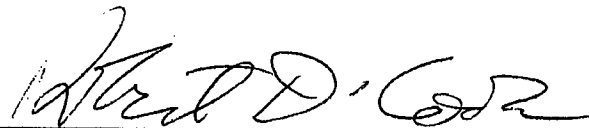
Attorney General
JOHN W. McINTOSH
Chief Deputy Attorney General
ROBERT D. COOK
Assistant Deputy Attorney General
Counsel of Record
T. PARKIN HUNTER
Assistant Attorney General
LEIGH CHILDS CANTEY
Assistant Attorney General
ELIZABETH H. SMITH
Assistant Attorney General
Post Office Box 11549
Columbia, South Carolina 29211
(803) 734-3970

Counsel for the State of South Carolina

VERIFICATION

I, Robert D. Cook, hereby state that I am Deputy Attorney General for the State of South Carolina; that I am authorized to make this Verification on behalf of the State of South Carolina; that the knowledge and information required to make this verification has been accumulated and is not available from a single individual; and that the statements set forth in the respective Responses to Defendant's First Set of Contention Interrogatories are true and correct to the best of my knowledge and belief, based on my investigation.


Dated: April, 2010

A handwritten signature in black ink, appearing to read "Robert D. Cook", written over a horizontal line.

Robert D. Cook
Deputy Attorney General

CERTIFICATE OF SERVICE

Pursuant to Rule 29.5 of the Rules of this Court, I certify that all parties required to be served have been served. On April 2, 2010, I caused copies of Plaintiff South Carolina's Responses to Defendant North Carolina's First Set of Contention Interrogatories to be served by first-class mail, postage prepaid, and by electronic mail (as designated) on those on the service list in the Case Management Plan dated January 7, 2009.



Scott K. Attaway
*Special Counsel to the
State of South Carolina*

EXHIBIT C

Southeastern U.S. Stricken With Extreme Drought, Life.com (Oct. 20, 2007), <http://www.life.com/image/77430567>.



Southeastern U.S. Stricken With Extreme Drought

LAKE WYLIE, SC - OCTOBER 20: Docks and piers at T-Bones, a shoreline restaurant on Lake Wylie, sink into the mud, showing the effects of increasingly low water levels October 20, 2007 in Lake Wylie, South Carolina. Due to low water levels caused by severe drought, many boat ramps in the area have been closed. Lake Wylie and Lake Norman, both fed by the Catawba River, are seeing their shorelines increase as water levels drop.

Southeastern U.S. Stricken With Extreme Drought, Life.com (Oct. 20, 2007), www.life.com/image/77430580.



Southeastern U.S. Stricken With Extreme Drought

LAKE WYLIE, SC - OCTOBER 20: Cement barricades block entry to the boat ramps at the Buster Boyd access area of Lake Wylie October 20, 2007 in Lake Wylie, South Carolina. The boat ramps at the recreational area are closed due to low water levels caused by severe drought. Lake Wylie and Lake Norman, both fed by the Catawba River, are seeing their shorelines increase as water levels drop.

Southeastern U.S. Stricken With Extreme Drought, Life.com (Oct. 20, 2007), www.life.com/image/77430576.



Southeastern U.S. Stricken With Extreme Drought

LAKE WYLIE, SC - OCTOBER 20: Docks buckle on dry land at the Buster Boyd access area of Lake Wylie October 20, 2007 in Lake Wylie, South Carolina. The boat ramps at the recreational area are closed due to low water levels caused by severe drought. Lake Wylie and Lake Norman, both fed by the Catawba River, are seeing their shorelines increase as water levels drop.

Tega Cay:



Tega Cay:



Lake Wateree Association, Inc., *Drought Photos,*

http://www.lakewaterecassociation.org/index.php?option=com_content&view=article&id=43&Itemid=53



Lake Wateree Association, Inc., *Drought Photos,*

http://www.lakewaterreassociation.org/index.php?option=com_content&view=article&id=43&Itemid=53



IN THE
SUPREME COURT OF THE UNITED STATES

No. 138, Original

STATE OF SOUTH CAROLINA,
Plaintiff,

v.

STATE OF NORTH CAROLINA,
Defendant.

CERTIFICATE OF SERVICE

Pursuant to Rule 29.5 of the Rules of this Court, I certify that all parties required to be served have been served. On July 30, 2010, I caused copies of the Opening Letter Brief of the State of South Carolina to be served by first-class mail, postage prepaid, and by electronic mail (as designated) on the Special Master, defendant State of North Carolina, intervenors Catawba River Water Supply Project and Duke Energy Carolinas, LLC, and *amicus curiae* City of Charlotte, North Carolina.



David C. Frederick
*Special Counsel to the
State of South Carolina*

SERVICE LIST

Kristin Linsley Myles, Special Master
(myleskl@mto.com)
Jonathan Blavin
(jonathan.blavin@mto.com)
Laurie Stoker
(laurie.stoker@mto.com)
Munger, Tolles & Olson LLP
560 Mission Street, 27th Floor
San Francisco, California 94105-2907
(415) 512-4000

Office of the Special Master

Christopher G. Browning, Jr.
(cbrowning@ncdoj.gov)
James C. Gulick
(jgulick@ncdoj.gov)
Marc D. Bernstein
(mbernstein@ncdoj.gov)
J. Allen Jernigan
(ajern@ncdoj.gov)
Jennie W. Hauser
(jhauser@ncdoj.gov)
Mary L. Lucasse
(mlucasse@ncdoj.gov)
North Carolina Department of Justice
P.O. Box 629
Raleigh, North Carolina 27602
(919) 716-6900

Counsel for Defendant State of North Carolina

Thomas C. Goldstein
(tgoldstein@akingump.com)
Troy Cahill
(tcahill@akingump.com)
Akin Gump Strauss Hauer
& Feld, LLP
1333 New Hampshire Avenue, N.W.
Washington, D.C. 20036-1564
(202) 887-4000

James W. Sheedy
(jimsheedy@driscollsheedy.com)
Susan E. Driscoll
(sdriscoll@driscollsheedy.com)
Driscoll Sheedy, P.A.
11520 North Community House Road
Suite 200
Charlotte, North Carolina 28277
(704) 341-2101

Counsel for Intervenor Catawba River Water Supply Project

Carter G. Phillips
(cphillips@sidley.com)
Virginia A. Seitz
(vseitz@sidley.com)
Roger R. Martella
(rmartella@sidley.com)
James W. Coleman
(jcoleman@sidley.com)
Sidley & Austin LLP
1501 K Street, N.W.
Washington, D.C. 20005
(202) 736-8270

Garry S. Rice
(gsrice@duke-energy.com)
Associate General Counsel
Duke Energy Corp.
Legal Affairs – EC03T
P.O. Box 1006
Charlotte, North Carolina 28201-1006
(704) 382-8111

Dean M. Moesser
(dean.moesser@duke-energy.com)
Associate General Counsel – Litigation
Duke Energy Corp.
5555 San Felipe Street, Suite 1245
Houston, Texas 77056
(713) 375-0688

Counsel for Intervenor Duke Energy Carolinas, LLC

James T. Banks
(jtbanks@hhlaw.com)
H. Christopher Bartolomucci
(hcbartolomucci@hhlaw.com)
Audrey E. Moog
(amoog@hhlaw.com)
Adam J. Siegel
(ajsiegel@hhlaw.com)
Hogan & Hartson LLP
555 Thirteenth Street, N.W.
Washington, D.C. 20004
(202) 637-5600

Parker D. Thomson
(pdthomson@hhlaw.com)
Hogan & Hartson LLP
1111 Brickell Avenue, Suite 1900
Miami, Florida 33131
(305) 459-6500

DeWitt F. McCarley
(dmccarley@ci.charlotte.nc.us)
City Attorney
Office of the City Attorney
600 East Fourth Street
Charlotte, North Carolina 28202
(704) 336-4112

H. Michael Boyd
(hmboyd@ci.charlotte.nc.us)
Senior Assistant City Attorney
Charlotte-Mecklenburg Utilities
5100 Brookshire Boulevard
Charlotte, North Carolina 28216
(704) 391-5110

Counsel for Amicus Curiae City of Charlotte, North Carolina