SummerCEm Resource

From: mandchic78@gmail.com on behalf of Mandy Hancock [mandy@cleanenergy.org]
Sent: Wednesday, July 07, 2010 3:50 PM
To: SummerCOLEIS Resource
Cc: Sara Barczak
Subject: VC Summer DEIS Comments
Attachments: F-SACE_VC SummerDEISwrittencomments070710.pdf

Please see attached for written comment regarding the Draft EIS of the VC Summer COL Application.

Thank you~

--
Mandy Hancock
High Risk Energy Organizer
http://www.cleanenergy.org
http://www.climateaction.net/nuclear
mandy@cleanenergy.org
mandy.h.hancock@gmail.com
(229)563-6090

Federal Register Notice: 74FR323
Comment Number: 30

Mail Envelope Properties (AANLkTikDd9dwO2Lyatr1Zk-jk3amIZHnCBIOMMlqAQor)

Subject: VC Summer DEIS Comments
Sent Date: 7/7/2010 3:49:42 PM
Received Date: 7/7/2010 3:49:49 PM
From: mandchic78@gmail.com

Created By: mandchic78@gmail.com

Recipients:
"Sara Barczak" <sara@cleanenergy.org>
Tracking Status: None
"SummerCOLEIS Resource" <SummerCOLEIS.Resource@nrc.gov>
Tracking Status: None

Post Office: mail.gmail.com

Files	Size	Date & Time
MESSAGE	382	7/7/2010 3:49:49 PM
F-SACE_VC SummerDEISwrittencomments070710.pdf	300120	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

cleanenergy.org
Southern Alliance for Clean Energy

Chief, Rulemaking, Directives, and Editing Branch
Division of Administrative Services, Office of Administration
Mailstop TWB-05-B01M
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Email: Summer.COLEIS@nrc.gov

Re: Southern Alliance for Clean Energy's Comments on the Draft Environmental Impact Statement for the V.C. Summer Combined Operating License for Units 2 & 3

July 07, 2010

Southern Alliance for Clean Energy is a regional non-profit organization with members in South Carolina and across the Southeast concerned about the impacts energy choices have on our health, economy and environment.

We have serious concerns about SCE&G and Santee Cooper's push to build two costly new AP1000 reactors at the existing V.C. Summer nuclear plant. The uncertainties associated with building new nuclear reactors continue to escalate, putting ratepayers, taxpayers, and the environment at increasing risk. As the NRC is aware, the Westinghouse AP1000 design that SCE&G is pursuing is not certified and has yet to be built or operate anywhere in the world. These many risks are not adequately addressed in the Draft Environmental Impact Statement (DEIS).

Clean Energy Solutions Exist

Utilities in South Carolina have better ways to meet the region's increasing demand for energy while protecting our water resources and tackling global warming. Investing more resources in the region's wind, solar, and bio-energy industries and promoting energy efficiency measures instead of building costly new nuclear reactors would benefit SCE&G and Santee Cooper and offer economic development opportunities for the region, without draining our water resources or our pocketbooks. The NRC must better evaluate these alternatives, including a combination of them, more thoroughly before allowing SCE&G to commit the billions of dollars, millions of gallons of water, and at least an entire decade to building these reactors when that time and money could be better spent on less risky, more sustainable solutions.

Renewable energy technologies, like bio-energy, solar, and wind are not likely terrorist targets nor have the capacity, in terms of accidents, to kill thousands of people or permanently contaminate large land areas. Energy efficiency measures also pose no health or safety risks to the public, save consumers money and preserve our water resources. South Carolina utilities have significant resources to tap in these areas as outlined in a recent extensive report, "Energy

P.O. Box 1842
Knoxville, TN 37901
Phone: (865) 637-6055
Toll-free: (866) 522-SACE
Fax: (865) 524-4479

250 Arizona Avenue, NE
Atlanta, GA 30307
Phone: (404) 373-5832
Fax: (770) 234-3909

29 North Market Street
Suite 409
Asheville, NC 28801
Phone: (828) 254-6776
Fax: (828) 254-5466

P.O. Box 8282
Savannah, GA 31412
Phone: (912) 201-0354

P.O. Box 1833
Pittsboro, NC 27312
Phone: (919) 545-2920

Efficiency in the South," by Georgia Tech and Duke University[1] and our 2009 report, "Yes We Can: Southern Solutions for a National Renewable Standard."[2]

Santee Cooper and SCE&G have wind resources within their service territories. The Clemson University Restoration Institute[3] shows that South Carolina is poised to lead the charge toward renewable offshore wind energy with its high offshore wind capacity and to reap large economic benefits from the manufacture of wind turbines. Though offshore wind is mentioned in the DEIS, it is downplayed. Wind, solar, clean bio-energy sources, and efficiency should be fully employed before building expensive and risky nuclear reactors. The NRC should evaluate a ***combination*** of these resources as a viable alternative to building new reactors. The NRC is not limited to comparing only wind to nuclear, or only solar to nuclear – a combination of alternatives is certainly an option the NRC should evaluate.

The utilities are overestimating capacity needs given their reliance on 2006 projections and the NRC needs to fully evaluate whether the additional generating capacity is truly needed, considering the recent trend of decreased energy demand resulting from the current depressed economy. This fact is further complicated by the reality of the high cost of new nuclear reactors that have historically led to cost overruns and rate increases. This is happening currently in South Carolina and elsewhere. The price for new reactors, such as Westinghouse's yet-to-be-certified AP1000 design that SCE&G intends to build, has skyrocketed. Utilities in Florida pursuing the same reactor design have recently stated costs of $8.6 to $11.25 billion per reactor, more than tripling their estimates from several years ago. The NRC needs to review updated demand forecasts and cost figures for the proposed V.C. Summer expansion in South Carolina, as it is highly unlikely that new reactors are a more cost-effective choice than a combination of energy efficiency and renewables or the no action alternative. It is highly unlikely that the costs of building ***two*** new reactors at the Summer site would cost $9.8 billion as expressed in Table 10-4 of the DEIS.[4]

Water Impacts

Nuclear power plants have a large impact on water quantity and quality. Nuclear power plants release radioactive contaminants and hazardous chemicals into surrounding water resources, contribute greatly to thermal pollution, negatively impact aquatic life, and require enormous volumes of water in order to operate. Nuclear power requires more water use than other traditional forms of energy production and significantly more water than energy efficiency measures and clean energy technologies such as solar and wind.[5] Neither this reality, nor the history of severe droughts in this region, is adequately considered in the DEIS.

The DEIS states that Unit 1 uses 767 million gallons of water per day.[6] Table 3-6 in the draft EIS

---

[1] See http://www.seealliance.org/se_efficiency_study/full_report_efficiency_in_the_south.pdf
[2] See http://www.cleanenergy.org/images/files/SERenewables022309rev.pdf
[3] See http://www.clemson.edu/restoration/focus_areas/renewable_energy/wind/index.html
[4] United States Nuclear Regulatory Commission (NRC), DRAFT Environmental Impact Statement for Combined Licenses at the Virgil C. Summer Nuclear Station Units 2 & 3, NUREG-1939, vol. 1, Table 10-4, p. 10-21, April 2010.
[5] Hoffmann, J., S. Forbes, T. Feeley, U.S. DOE, Estimating Freshwater Needs to Meet 2025 Electrical Generating Capacity Forecasts, June 2004.
[6] United States Nuclear Regulatory Commission (NRC), DRAFT Environmental Impact Statement for Combined Licenses at the Virgil C. Summer Nuclear Station Units 2 & 3, NUREG-1939, vol. 1, p. 5-24, April 2010.

shows that the proposed two new reactors are estimated to withdraw 53.5 million gallons per day from the Monticello reservoir during normal use and consume, or lose, between 39-44 million gallons per day.[7] These are massive quantities. So the combined water withdrawals for all three reactors (1 existing, 2 proposed) would be over 820 million gallons per day, competing with the 93.4 million gallons per day required for public use in the economic impact area of the proposed site.[8]

The Broad River system, from which the existing and proposed new V.C. Summer reactors will rely, is already stressed and is relied upon by a variety of industrial and municipal users. Further, other proposals, such as Duke Energy's efforts to expand the Cliffside coal plant and build two new reactors at the Lee site in South Carolina, also aim to use huge amounts of water from the Broad River. The full extent of these proposed impacts are not discussed in the draft EIS. With all of these proposals simultaneously underway, the combined effect of these proposals must be evaluated by the NRC to ensure informed and prudent decisions are made on how to best use limited water resources.

Cumulative Impacts

South Carolina is the most nuclear power reliant state in the Southeast and the third most reliant in the country, with about 58% of its electricity produced by nuclear power. Further, a host of nuclear waste and nuclear industrial operations are here in South Carolina. The Savannah River Site nuclear weapons complex near Aiken is the most radioactive Department of Energy site in the nation. The Barnwell radioactive waste nuclear dump is also a radioactive hot spot. Nowhere in the DEIS does it discuss the cumulative impacts of having all these nuclear facilities operating in South Carolina or the cumulative health impacts to Carolinians. The NRC must address these cumulative impacts to water resources and human health if it is to make a truly informed decision on adding two more reactors into this already radioactive mix.

Summary

Fundamentally, we believe the DEIS has not fully addressed the full environmental and public health impacts of the V.C. Summer proposal or the possibility of pursuing a combination of alternative energy options. With billions of ratepayer and likely taxpayer dollars going towards this project, it is frustrating that a full and comprehensive analysis of how this proposal will impact South Carolinians and their surrounding natural environs has not been the outcome in this draft Environmental Impact Statement.

Sincerely,

Sara Barczak, Program Director &
Mandy Hancock, Organizer
High Risk Energy Choices Program
Southern Alliance for Clean Energy

[7] United States Nuclear Regulatory Commission (NRC), DRAFT Environmental Impact Statement for Combined Licenses at the Virgil C. Summer Nuclear Station Units 2 & 3, NUREG-1939, vol. 1, p. 3-37, Table 3-6, April 2010.
[8] United States Nuclear Regulatory Commission (NRC), DRAFT Environmental Impact Statement for Combined Licenses at the Virgil C. Summer Nuclear Station Units 2 & 3, NUREG-1939, vol. 1, p. 160, Table 2-37, April 2010.