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To: <tkaine@governor.virginia.gov>
Date: Fri, Nov 3, 2006 4:26 PM
Subject: URGENT: North Anna Power Station Early Site Permit

November 3, 2006

The Honorable Timothy M. Kaine

Governor of Virginia

Dear Governor Kaine - For your information, please find attached the comments filed by the Natural Resources Defense Council (NRDC) -- a national environmental advocacy organization with over a million members and on-line activists and 37 years of experience litigating to protect the environment -- with the federal Nuclear Regulatory Commission (NRC) and VDEQ regarding Dominion's pending "Early Site Permit" (ESP) for construction of two additional nuclear units at the North Anna Power Station (NAPS) on Lake Anna. (You should be aware by this time that the professional staff of the federal Environmental Protection Agency (EPA) has found NRC's analysis of the environmental issues surrounding Dominion's proposal to be deficient).

We have become very concerned in recent weeks with the way VDEQ, and by extension, your own administration, have been handling the public comment and response process surrounding the State's pending "federal consistency" determination for this permit under the Coastal Zone Management Act (CZMA). Until an alert citizen's group - Friends of Lake Anna - learned from EPA that senior VDEQ officials were seemingly intent on ducking resolution of the most pertinent and pressing issues until well after granting its official CZMA "concurrence," it appears your administration was embarked on the easy path of paying lip service to meaningful public involvement in decision-making, while crafting its real policy decisions in secret. Indeed, it was this concern that prompted our recently filed FOIA request to VDEQ on this matter (please see the second attachment).

We are disturbed by reports from citizens around the Lake and government officials that a senior VDEQ official, one Michael Murphy, may have privately taken upon himself the task of acting as agent for Dominion within state government, taking initiatives to short-circuit the public review process, while pressuring other state agencies, such as DGIF, to quietly retract their publicly stated concerns about the project so that VDEQ can quickly concur with a federal consistency certification on Dominion's timetable, without resolving the complex environmental issues at stake. We understand that other VDEQ officials may also be part of this secretive effort to steer and manipulate the CZMA process to a predetermined conclusion.

We find this situation to be regrettable and unacceptable, and given the lack of any public response from your office to date, we are forced to speculate whether it reflects your Administration's intended policy. The VDEQ must make a comprehensive written, collated public response to the many concerns and issues -- including the thorny issues of Clean Water Act jurisdiction, monitoring, and lax enforcement -- that have been raised in the public comment process, and then allow for a reasonable interval - a minimum of 90 days seems fair to us - for the public to examine VDEQ's responses and those of other agencies, before there can be any further consideration of Dominion's federal consistency certification under the CZMA for its North Anna Early Site permit.

Indeed, it appears that VDEQ's intention was to proceed on November 3 with a certification determination coincident with, or possibly even before providing the state's complete considered response to all the many substantive and legal concerns that citizens, NGO's, and other state and federal agencies have expressed about the project. That deadline has now been extended by a mere two weeks, to November 16, which in light of the circumstances, we still regard as woefully premature, and subversive of meaningful public participation and protection of the public interest. We respectfully suggest that the extent of the unresolved environmental issues means that any such CZMA determination, made in good faith and with due regard for the public interest, is still several months away, at the earliest, depending on the concessions that Dominion is prepared to make to protect Lake Anna and the downstream watershed.

Moreover, since the public hearing in August 2006, Dominion has filed at least three further revisions to its Early Site Permit with the NRC, undermining the integrity and completeness of the public comment process conducted last summer by VDEQ and NRC. And as the VDEQ has itself observed in its comments to the NRC, if Dominion is bent on water-cooling for its proposed 1500 MW Unit 3, it has an alternative site at Surrey, VA on the lower James that must be assessed as far superior from the standpoint of withdrawing large volumes of cooling water, and dissipating the vast amounts of waste heat from additional reactors units (about 65 % of the energy from a nuclear plant is typically released to the environment in the form of waste heat). Moreover, if Dominion continues to insist on building the proposed Unit 3 at the Lake Anna site, it could, at some additional cost to its shareholders, abate the concerns about further thermal pollution of the lake by revising its ESP to require a dry air-cooling tower for this unit - as it has already conceded will be necessary for the prospective Unit 4.

Doubtless you recognize that as a legal matter, once the state "concurs" - even with "conditions" attached -- with the environmental impacts of

the project as currently described in Dominion's constantly mutating ESP, the state forecloses its legal rights and negotiating leverage under the CZMA to obtain further remedial changes in the design of the project that would limit or mitigate its environmental impacts. Similarly, once the ESP is granted, and absent a showing of significant new information becoming available that was not available previously, the NRC regards the "environmental" issues involved in siting and operating the plant as closed. The bar to reopening these allegedly "resolved" issues is quite high. We can see no advantage to the citizens of Virginia, and lots of disadvantages, for the State government to forego its bargaining leverage on behalf of the public interest this early in the process.

Beyond the immediate question of harmful environmental impacts at Lake Anna, Dominion's proposal raises a host of other issues regarding the future cost and security of energy supplies for the State of Virginia. As you are no doubt aware, Dominion would not even be pressing the case for a third (and possibly fourth) reactor at North Anna were it not for the generous production tax credits, loan guarantees, and other subsidies that the Republican-led Congress passed in the Energy Policy Act (EPACT) of 2005, amounting to on the order of \$0.02 per kilowatt hour over the entire payback period for the plant. As governor you must take account of the fact that some or all of these federal subsidies could be revoked by a future Congress, leaving "stranded" nuclear plant costs that Dominion will inevitably seek to shift from its stock- and bond-holders to the ratepayers of Virginia.

Notwithstanding this future uncertainty, there is today no pressing urgency to approve Dominion's current preferred ESP for the North Anna Site. Early site approval will not serve to "lock in" Dominion's share of the federal subsidy, because under recently promulgated IRS rules, the future production tax credit will remain accessible to all new nuclear units that apply for construction/operating licenses before the end of 2008 and begin construction of the reactor building by January 1, 2014. Thus there is plenty of time to resolve the environmental impact issues of Dominion's proposal in a way that fully protects the natural resources of the CZMA, as well as the rights and interests of the many Virginia citizens that live around or recreate on Lake Anna.

We also note that the North Anna River watershed includes several rapidly growing jurisdictions that are likely to draw on the watershed for drinking and irrigation water in the decades ahead, and these competing uses need to be (but have not been) considered when evaluating the evaporative losses from the Lake that would be caused by water-cooling of the third unit. A rush to judgment in this matter will be seen for what it is - an unseemly capitulation to the state's preeminent private business interest at the expense of the public interest. Nuclear reactors are a 40-50 year investment. There is no chance that Dominion's new units will come on line during your term, and only a small chance that construction will begin at the site, but as governor, you have an obligation to future generations of Virginians to

ensure that such long term investments are done in a way that protects their environment, health, security, and economic well-being.

The Uncertain Economics of New Nuclear Power Plants

Beyond the immediate and pressing environmental concerns, we have identified several other significant concerns that suggest the State would be wise to defer consent to any new nuclear power generation permits, including the pending ESP, until a national greenhouse gas emissions cap has been established at the federal level, thereby providing a firmer cost basis for nuclear power relative to other sources that are currently much cheaper. This step would give Dominion some added incentive to openly support what it should have been supporting all along-if it is sincerely interested in making nuclear an economic source of low-carbon energy rather than just grabbing taxpayer subsidies-namely "leveling the economic playing field" with more polluting fossil fuels by means of a declining emissions cap and tradable allowances, or alternatively an explicit tax on environmentally destructive global warming emissions.

Nuclear clearly needs a so-called "carbon cap" to become competitive in today's energy market. For example, a new 1600 MW nuclear reactor, under construction by a French-German consortium in Finland, is roughly the same size as Dominion's proposed Economic Simplified Boiling Water Reactor (ESBWR), but is now predicted to cost at least \$3.8 billion, more than twice its original cost estimate of only two years ago. The economic equivalent of a very hefty "tax" on carbon emissions will be required to overcome this nuclear cost differential with other conventional sources of central-station electric power, to say nothing of decentralized, distributed-generation competitors, such as industrial waste heat co-generation and renewable sources. Dramatic cost escalation has historically been the standard M.O. of the nuclear industry, and it's still far too soon to tell whether this legacy can be overcome in the supposedly "new" generation of plants, which, by the way, look and operate a lot like the older generation of plants, and really represent only a modest evolutionary improvement in design, and quite possibly little or no improvement in cost.

New Energy Sources for Virginia Should be Prioritized

According to Their Relative Costs, Risks, and Environmental Sustainability

Before agreeing to add costly long-term nuclear investments to the rate base, the State Corporation Commission should require Dominion to comprehensively survey the potential for waste-heat cogeneration and

improvements in end-use efficiency among its customers. Indeed, as part of the process of resolving the issues involved in Dominion's pending ESP, as governor you could request that Dominion agree to contract with a credible independent expert consulting firm to begin that study now, rather than awaiting the SCC proceeding that would add the new nuclear plant(s) to the rate base. We are convinced that there are hundreds of millions and perhaps billions of "negawatts" in energy savings and waste-heat co-generation opportunities in Dominion's service area that are available at significantly less cost per-delivered-kilowatt than nuclear. We believe it makes both environmental and economic sense for the state to harvest this less expensive energy potential from the existing grid before committing to the complexity, environmental impacts, and risks of nuclear power plant construction and operation. We also note that the construction cost of solar energy now being targeted for early next decade, by more than a dozen companies worldwide, is in the range of \$1-2 dollars per peak watt, or \$1-2 thousand per peak kilowatt. This is significantly less than the cost of the nuclear plants being proposed for construction in the same period, further adding to the economic uncertainty surrounding nuclear plants.

Nuclear may well have an important place in Virginia's energy future-particularly if it replaces an already operating dirty coal plant, rather than merely balancing or offsetting the carbon emissions of a new coal plant to be built elsewhere-but we must admit we have our doubts, as do many other expert observers of the industry. It is no accident that nuclear generation continues to prosper precisely in those areas of the industrial world - Russia, China, India, Japan, South Korea, France, and now Iran -- where economic competition and free markets are the least prevalent, and where the state role in directing (and distorting) the economy is the greatest.

In an age of virulent terrorism and climate change, we question the strategy of concentrating four reactors at the North Anna site, at least three of which would clearly be crippled by a prolonged drought, or by a terrorist attack that breached the small dam forming Lake Anna, resulting in a draining of the lake, which could require several years to refill. A third and potential fourth nuclear unit at North Anna would more than double the amount of recently discharged highly radioactive fuel assemblies kept in vulnerable spent fuel pools at the site, where it is already vulnerable to a terrorist attack that could spread a cloud of lethal radiation well beyond the site boundary. These scenarios could sideline over 20% of Virginia's future generating capacity for a prolonged period, and would seem to constitute an unacceptable vulnerability in the state's long-term energy supply.

The State Needs a Draft Energy Plan Now to Focus Public Discussion and Forge a Political Consensus

It would greatly assist public education and debate, and public policy formulation by the legislature, if your office were to offer its own forward-leaning Draft State Energy Strategy, for use in a consensus-building process based on iterative public review, comment, and revision. The current public process is hobbled by the fact that there is no concrete proposal for the public to comment on, and thus the discussion of energy issues at the statewide level remains unproductively unfocused, random, and vague, and leaves the misleading impression that Dominion's proposal for additional nuclear units is the only "real alternative" to construction of additional dirty coal-fired plants.

We know that you know this is obviously not the case, and we urge you to advance the public's awareness of the full range of low greenhouse-gas-emitting alternatives, including but not limited to nuclear, by issuing your own draft energy strategy for public comment. If an independent-minded governor in California can lead his state to the cutting edge of climate change and energy policy, in defiance of his party's national policies, we see no reason why a popular governor cannot use the powers of his office to advance similar policies here in Virginia -- enlightenend policies which already enjoy widespread support among the leaders of his party at the national level. Your reticence unfortunately suggests a mistaken belief among your advisers that most Virginians, unlike Californians, are just not smart enough to comprehend the magnitude of the climate change threat, and hence the pressing need to move forward with a wide range of sustainable energy sources that go beyond the expensive but intrinsically hazardous low-carbon option represented by nuclear power.

We take the opposite view - that the vast majority of Virginians will respond to forward-leaning, creative political leadership in Richmond on this issue. Most Virginians do not want their energy future to revolve around an artificially constricted choice between dirty polluting coal-blasted from Appalachian mountain-tops that are our natural inheritance and should be passed on intact to future generations-and nuclear power, which is low-carbon, yes, but also costly, inherently hazardous, with a fuel cycle that relies on a mined resource - uranium ore - whose extraction and processing causes severe environmental damage and contamination in areas quite remote from the Old Dominion. There are better choices.

The Immediate Need: Continue the State's Objection to Federal Consistency Certification for Dominion's Early Site Permit

Until All Outstanding Issues Are Resolved in a Manner that Fully Protects Virginia's Environment and Energy Security

More immediately, while we are well aware of the outsized role that

Dominion Resources Corp. plays in the politics of this state, including its personal ties to senior members of the Democratic Party establishment, we are also aware of your campaign pledges, and your ongoing responsibility as governor, to protect the surface waters of the State of Virginia. Therefore we ask at this moment that you take immediate action, as outlined above, to ensure that VDEQ's federal consistency process under the CZMA for Dominion's Early Site Permit avoids both the reality and appearance of being "rigged," and affords a full and fair opportunity for public review and dialogue with State and Dominion officials regarding VDEQ's forthcoming (and hopefully comprehensive) response to the objections and concerns citizens have raised to date regarding Dominion's declared intent to continue, and even increase, its ongoing thermal pollution of Lake Anna in violation of federal Clean Water Act standards. Rectifying this past and prospective pattern of damaging excessive thermal discharges into the waters of Lake Anna cannot reasonably be divorced from the state's consideration of whether to concur with the current terms of Dominion's proposed Early Site Permit, nor can this necessary review be completed in the time presently allotted (i.e. by Nov. 16th).

All the outstanding surface water compliance issues with regard to NAPS must therefore be resolved in a manner fully protective of Virginia's environment before the State can, in good faith, "concur" that the terms of Dominion's Early Site Permit for additional units at North Anna are "consistent with the state's enforceable policies" for protecting the natural resources of Virginia's Coastal Zone Management Area.

If you or members of your staff have any questions regarding these matters, please do not hesitate to contact me. We look forward to working with you to inject a larger measure of ingenuity, innovation, environmental protection, and common sense into the state's planning for a clean and sustainable energy future.

Sincerely,

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Comments of the Natural Resources Defense Council re NAPS-ESP to NRC.doc	98816	
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September 8, 2006

Mr. Jack Cushing, Environmental Project Manager
for North Anna ESP Site Application,
U.S. Nuclear Regulatory Commission,
Washington D.C. 20555
Via email to JXC9@NRC.GOV

Dear Mr. Cushing:

On behalf of the Natural Resources Defense Council (NRDC), a national environmental organization with some one million members and on-line activists, some of whom reside in Virginia, I am writing to comment on whether the NRC's Supplemental Draft EIS (SDEIS) of July 2006 is sufficient to support Dominion Power's request for state concurrence that the terms of its proposed NRC Early Site Permit (ESP) for two new reactors at its North Anna, VA nuclear power plant are consistent with the enforceable policies of Virginia's Coastal Zone Management Program (VCP). (These same comments have also been submitted to the VDEQ).

After studying the matter, we find that we have a number of serious objections to the SDEIS and to the state's providing its concurrence at this time. These concerns are summarized in the numbered sections below.

(1) Concurrence Now Would be Premature and Not in the Interests of Ensuring Protection of Virginia's Coastal Zone Management Area.

We draw your attention, first of all, to the fact that an ESP is not a required step in NRC's licensing process, but merely affords the applicant the opportunity and convenience of resolving and permanently disposing of site-specific environmental issues years—and possibly decades—ahead of the actual inception of reactor construction. While Dominion is seeking an ESP, other companies, such as Progress Energy, South Carolina Electric & Gas, Duke Power, and Constellation Energy, are electing to resolve environmental siting issues at the subsequent Construction and Operating License (COL) stage, and many of these companies have announced nominal target dates for submitting COL license applications that are in the same time frame as Dominion's (Fall 2007).

Moreover, environmental concerns that the NRC deems to have been "resolved" during an ESP proceeding cannot be raised again at a subsequent stage of NRC's "streamlined" licensing process. Faced with a project whose design is continually evolving, this foreclosing aspect of the ESP process is not in the state's favor. And finally, as you well know, once a state concurs, even with conditions, once having done so it "retains no further consistency authority over the project..." and cannot, through the CZMA, enforce its conditions after it has concurred (Federal Register, Vol., 65, No. 237, page 77127). But by objecting, VDEQ preserves its option either to continue its objection or to revisit the issue if Dominion agrees to conditions that are fully protective of the environmental equities at stake.

Since the ESP is an optional early stage process devised primarily for the convenience of the applicant, and the environmental impacts of Dominion's continually evolving proposal are at this point still defined by a general "plant parameter envelope," comprised of nominal operating values rather than those pertaining to a site-specific detailed plant design, we see no advantage, and significant disadvantages, to VDEQ offering its concurrence (or conditional concurrence) at this time.

(2) Understanding of the Long-Term and Cumulative Environmental Impacts from Operating Dominion's Proposed Unit 3 "Wet-Dry" Hybrid Cooling System is Currently Insufficient to Support a Federal Consistency Determination..

A major issue confronting the VDEQ is whether the newly proposed "wet-dry" cooling system will reduce environmental impacts sufficiently to warrant concurring in Dominion's federal consistency determination for the pending ESP. VDEQ's "Consistency Status Report" to Dominion, dated August 3, 2006, states: "That new method involves a new, closed cycle wet and dry cooling method that would reduce the water demands associated with the once through cooling proposed in the original certification. During periods of relative surplus (when lake levels are at or above 250 feet above mean sea level), wet towers would be used. During dry periods (lake levels under 250 feet for 7 consecutive days or more, a dry cooling tower would be used, unless weather conditions dictate otherwise (the "maximum water conservation mode") [see Draft EIS Supplement, pages 3-8 and 3-9]

From our reading of the NRC's July 2006 Supplemental Draft Environmental Impact Statement (SDEIS), the preceding represents an incomplete and possibly mistaken view of how the proposed system would actually operate. During full power operation and "a hot and humid atmosphere at tower level" – fairly typical conditions for a peak power summer day in Central Virginia – the applicant is committing only that "*a minimum of one-third* of the rejected heat from Unit 3 would actually be removed by the dry tower system. The remaining excess heat would be dissipated by the wet tower system." [NUREG-1811, SDEIS, at 3-11 and K-4]

However, "During periods of favorable [but unspecified] atmospheric conditions, *more than one-third* (and *possibly* as much as 100 percent) of the rejected heat may be dissipated through the dry towers." [SDEIS, at K-4, emphasis added] "Therefore, although the MWC [Maximum Waster Conservation Mode] mode uses less water than the EC mode, it is possible that *up to two-thirds of the total heat load* would be dissipated by wet cooling." [SDEIS at 3-11] Not only possible, but probable. It's clear to us that this is the only binding commitment the applicant is making. After all, operating the dry cooling tower increases the parasitic load and would cost Dominion money, so one would expect that like any profit-seeking entity, Dominion will at all times and in all places seek to minimize its costs while complying with its minimum commitment to dissipate "at least one-third" of the Unit 3 reject heat through dry cooling.

3. The SDEIS prepared by the NRC Staff Fails to Analyze a Reasonable Range of Reasonably Foreseeable Impacts from Operating Unit 3.

Here are some of the nominal critical parameters listed by the NRC for the originally proposed once-through cooling system that VDEQ found unacceptable:

Rate of Lake water Withdrawal: 1,140,000 gallons per minute (gpm);

Induced Evaporation Rate: 28 cubic feet per second (cfs)

Additional Lake Level Drawdown under Drought Conditions: 3.4 feet

Here are the Supplemental DEIS estimates for the same parameters as above, for the wet-dry semi-closed loop system:

Maximum Rate of Lake water Withdrawal: 22, 269 gpm in (normal) "Energy Conservation Mode"

Induced Evaporation Rate: 20 cfs

Additional Lake Level Drawdown under Drought Conditions: 1.6 ft

These estimated impacts are still quite significant. In particular, the induced evaporation rate from operation of the wet-dry cooling system *is still 71 percent of the environmentally unacceptable once-through system*. The additional lake level drawdown under simulated drought conditions is still *almost half that of the once-through system*, and there are major uncertainties associated with this calculation that the NRC and Dominion have not bounded with a sensitivity analysis. (This analysis should be based on plausible excursions from and negative feedback interactions between their model's input parameters over the projected period in which the three reactors will be withdrawing water from Lake Anna.)

4. The Projected Lake Levels Pose Environmental and Energy Security Risks That Require Further Detailed Analysis Before Concurrence Can be Granted.

Under the Lake Level Contingency Plan (a condition of the North Anna plant's VPDES permit), releases from the dam are designed to maintain the lake level as close to 250 ft. above Mean Sea Level (MSL) as possible. When the lake level elevation drops below 250 MSL, releases from the North Anna Dam are reduced to 40 cfs. If the lake level drops below 248 MSL, releases are cut to 20 cfs. Releases are increased to 40 cfs when the lake level rises again to 248 ft MSL, and increased further when the lake level rises above 250 ft MSL.

According to the NRC's analysis, from 1978 to 2003, Lake Anna has been under the 250

ft MSL target level 62.7 percent of the time due to the combined effects of reduced inflows and the evaporative effects of operating Units 1 and 2. According to the NRC staff's historical simulation, the addition of the Unit 3 wet-dry cooling system would have increased that overall figure slightly, to 66.4 percent of the period spent under the target lake level, while also reducing the total time the lake level was at or above the target level by 3.7%.

So, *looking backward*, the addition of the Unit 3 wet-dry cooling system would clearly have reduced flows to the lower North Anna-Pamunkey river system. The biggest impact would have been registered in the increased number of days in which the lake level would have been at or below 248 feet, causing releases into the lower reaches of the North Anna river to be cut in half from 40 to 20 cfs. According to the NRC staff, these significantly reduced flow days would have increased by 6.2% over the 25 year period had the Unit 3 wet-dry cooling system been in operation.

As might be expected, there are numerous and severely debilitating problems with the NRC-Dominion water budget analysis for Lake Anna. As the NRC staff itself notes, "inherent in this analysis is the assumption that the 23-year period of record simulated would be representative of future conditions (e.g. inflows, precipitation, etc.) at the site." (NUREG-1811, SDEIS, Appendix K-13, emphasis added).

In light of the National Environmental Policy Act (NEPA) requirement that an EIS analyze all "*reasonably foreseeable*" impacts, the NRC analysis clearly falls short, because its water budget model is not predicated on any credible, forward-looking scientific estimates of what hydrological conditions within the North Anna-Pamunkey drainage could be like for the next 40 – 60 years, including population increases, water-table levels and recharge rates, competing uses for surface waters that could limit inflows to the lake, projected climate trends and attendant effects on evaporation rates, population increases, and so forth.

Moreover, the NRC staff estimate of historical inflows to the lake is not based on actual measurement of flows in the North Anna River drainage area, but estimated from flows in a smaller nearby (Little River) drainage for which there was historical data, and then scaling the results to estimate inflows to Lake Anna. Local precipitation is estimated based on rain gauges at the Richmond Airport, some 40 miles away. This methodology, and its historical bias, suggests that the model results are at best a gross approximation, and heightens the importance of a sensitivity analysis of the results

But there is no evidence that the NRC performed an analysis to test the sensitivity of its historical model results to plausible variances in the input data. For example, what is the effect on lake temperatures, on natural and induced evaporation rates, and coolant intake requirements if one assumes a small but steady increase in average surface temperatures over the next 60 years, punctuated by periods of that combine reduced precipitation with above-average summer temperatures?

One can envision the formation of a damaging negative feedback loop, in which increased natural heating of cooling intake water increases the evaporation rate of both the wet-dry and existing once-through cooling systems, leading to higher discharge temperatures and/or increased net withdrawals from the lake, leading to reduced lake volume via increased lake-surface and/or coolant tower evaporation (the heat has to be dissipated somewhere), leading to further heating of the reduced volume of intake water, and the cycle repeats itself. At this point, no one knows how vulnerable the proposed setup is to such a negative feedback loop scenario, but under stressful conditions of increased climate warming, falling water tables, and reduced rainfall, regulators might well be faced under the current ESP proposal with choosing between shutting down or reducing power at one or more North Anna units, or incurring serious ecological damage to the North Anna-Pamunkey river system and the recreational uses of Lake Anna, which are now extensive. This is not a hypothetical danger, as water-cooled reactors in Europe and the United States, all located on water bodies or rivers more substantial than Lake Anna, were forced in the summer of 2006 to temporarily shut down or reduce power due to excessive coolant intake temperatures and/or excessive thermal discharges.

To bound the possible effects of Unit 3 cooling on Lake Anna water levels and downstream releases, the NRC analysis purports to examine the simulated impacts of operating Unit 3 wet-dry cooling during what was a critical drought period between April 2001 and February 2003. This simulation is hardly encouraging. Operation of Unit 3 with wet-dry cooling would have dropped the minimum lake level experienced during this period by an additional 1.7 feet, to 243.5 MSL. That is only 1.5 feet above the minimum operational plant intake level of 242 ft MSL, where the North Anna reactors would be forced to shut down. Given possible errors and plausible variances in the model's input data, we do not believe this provides a sufficient or safe operating margin.

Aside from miles of mudflats surrounding the residences, docks, marinas and State Park lining the shores of Lake Anna, this scenario suggests a disturbing vulnerability in Virginia's electrical supply. Units 1 and 2 already account for about 15% of the state's electric power generation, and adding Unit Three's 1560 MWe would probably boost the NAPS contribution to 25% or more of the state's total. Putting the state's public safety and economy at the mercy of a prolonged heat wave, or possible sabotage of the North Anna dam, does not suggest to us a responsible energy policy for the State.

5. The Status Quo is Not an Acceptable Baseline for NEPA Analysis.

The NRC analysis is implicitly predicated on the assumption that the current environmental impacts of Units 1 and 2 are themselves an acceptable environmental baseline, when such operations have already resulted in excessive temperatures in the main body of Lake Anna (i.e. well outside of the cooling lagoons), and produced many days of reduced flows into the lower reaches of the North Anna River.

A more credible baseline for analysis, and for estimating cumulative environmental impacts, would be the temperatures, flows and fauna in the North Anna river system

before the river was impounded to form Lake Anna. For example, prior to dam construction, flows of 25 cfs or lower would occur for about 10 weeks once every 10 years. From NRC's modeling data, one can calculate that operation of Units 1 and 2 has increased that frequency to 30 weeks every ten years, tripling the number of low flow days that prevailed before impoundment of the North Anna River. Such an analysis would appear to be required under NEPA's requirement to consider cumulative impacts.¹

6. The NRC's DEIS Unreasonably Discards Dry-Cooling for Unit 3 as an Alternative Worthy of Detailed Analysis, but VDEQ Should Not.

In its prior review of NRC's original DEIS for the North Anna ESP, VDEQ's Division of Water Resources expressed its concern for the adequacy of Lake Anna as a source of cooling water, based on the fact that a once-through design transfers all the reject heat to the aquatic environment. According to the SDEIS, this increased heat load would have pushed warmer water out of the cooling lagoons further into Lake Anna, extending lagoon-like conditions into about 19% of the total volume of the lake, and reducing the productivity of fish populations that are sensitive to temperature. The Division looked at other nuclear reactors along the East Coast to compare the water resources available to them with the water resources at North Anna. This review demonstrated:

- Most of the intake locations are tidal and have an essentially unlimited water supply;
- Of the remaining locations, the North Anna location has the least abundant water supply, based on the average flow of a small watershed (342 square miles) and a medium-sized reservoir;
- A limited number of nuclear power stations are located on non-tidal rivers, but in these cases, the power plants are on large rivers such as the Connecticut and the Susquehanna; and
- The only location remotely similar to North Anna's situation is the Oconee plants on Lake Keowee in South Carolina, but immediately below Lake Keowee is Hartwell Lake, so the section of non-tidal stream affected by consumptive loss is very short.

Dominion itself has recognized that Lake Anna would not support once-through, wet-cooling, or even a combination wet and dry cooling system for a fourth unit, and is therefore proposing an exclusively dry cooling system for this unit, construction of which is purely speculative at this point. Of course, this fact begs the question of why dry-cooling could not also be employed for the proposed Unit 3. This alternative is briefly

¹ From SDEIS Table K-3: Data is from 1978-2003 inclusive, so $26 \text{ years} \times 52 \text{ weeks} = 1352 \text{ weeks} \times 0.057 \text{ time fraction at 20 cfs reduced flow} = 77 \text{ weeks over 26 years or } 77/2.6 = 29.64 \text{ weeks over ten years.}$

mentioned as a "System Design Alternative" in the Supplemental DEIS issued July 2006, but it is dismissed in three paragraphs (out of a several hundred page document). Its benefits are briefly summarized as follows:

"The use of a dry cooling system design versus the proposed combination wet and dry cooling system design for Unit 3 would largely eliminate the [unit's] impacts on aquatic biota in Lake Anna and the North Anna River downstream. The Lake would not be heated by rejected heat from Unit 3, and there would be no additional consumptive water use." (SDEIS at 8-5, emphasis added)

Despite these very sizable environmental benefits, the SDEIS fails to identify the dry-cooling option as an "environmentally preferable" alternative deserving of further analysis. As justification, it merely states that "dry cooling systems are more expensive to build and are not as efficient as wet cooling systems." In support of this contention the SDEIS cites recent Dominion estimates that "the power needed to operate dry cooling towers would be 8.5 to 11 percent of the plant power output," or about 150 MW(e), reducing the net power output of the plant, versus a predicted parasitic load of "1.7 – 4 percent" to operate the wet-dry cooling system.

Relying on this scant body of evidence and analysis, the NRC staff concludes that, "based on its analysis that Lake Anna could support Unit 3 using a combination wet and dry cooling system, and given the environmental impact of increased use of resources [i.e. more land area and electricity] needed by using a less efficient dry cooling system, a combination wet and dry cooling system is [environmentally] preferable to a dry cooling system for Unit 3. (SDEIS at 8-5). But coincident with its judgment that a parasitic load of 150 MW(e)—if indeed it is that large—would be too burdensome on the Unit 3 project, Dominion and the NRC staff revised the ESP permit to increase the thermal output of Unit 3 by 200 MW(t), thereby allowing them to recover almost half of the electric output that would be "lost" to operation of the dry-cooling system.

According to GE, the ESBWR has a rated generating capacity of 1560 MW(e) and thermal power of 4500 MW(t). If the parasitic load to operate the dry tower cooling is 8.5–11 percent of plant output, then the load would be in the range of 133–172 MW(e), or "about 150 MW(e)" in the words of the NRC staff analysis. So the recent increase in the "plant parameter envelope" from 4300 to 4500 MW(t) implies that until very recently the "plant envelope" was 1490 MW(e), and that the recent power increase would allow recovery of some 70 MW(e) or about half of the estimated parasitic load for dry cooling..

Assuming that the project was deemed economically viable at the previous power level with the proposed wet-dry cooling system consuming up to 4% of output, or 60 MW(e): then the net output of Unit 3 with *wet-dry cooling before the power increase* would have been 1430 MW(e); and the net electrical output of Unit 3 with *dry-air cooling after the power increase* would be 1410 MW(e). It's difficult to understand why the difference of a mere 20 MW(e) would make or break the economics of a project of this magnitude, or lead NRC staff to summarily dismiss the dry-cooling option as being environmentally

inferior to Dominion's preferred wet-dry system. One suspects that the real calculus here is not environmental benefits or lack thereof but the forecast profitability of the project, which may be marginal even with the eight-year 1.8 cent/kWh production tax credit. Whatever the real motives at work, the SDEIS analysis of the dry-cooling alternative for Unit 3 is clearly inadequate, and the VDEQ should demand more information on this option before offering its concurrence.

7. Before Concurring that the Environmental Impacts of Activities Described in Dominion's Early Site Permit Are Consistent with the Enforceable Policies of the Virginia's Coastal Zone Management Program, VDEQ Has a Duty to Resolve Outstanding Issues Surrounding the Existing VPDES Permit for the North Anna Power Station,.

According to the testimony of citizen groups ("Friends of Lake Anna," and the "Lake Anna Civic Association") at the August 16, 2006 public hearing held in Mineral , VA., their water studies indicate that the North Anna River (3 miles before it enters Lake Anna) is 13 degrees cooler than the central part of the lake (above the Rt. 208 Bridge). These groups contend that several areas in the main body of the lake have recently experienced temperatures in the low to high nineties, which clearly exceed the 89.6 degree F temperature limitation in the Clean Water Act as defined in the NPDES.

We understand that Lake Anna is primarily an impoundment where the vast preponderance of the lake volume is re-circulated, which in turn causes the entire Lake to heat up. If water temperatures frequently exceed 90 degrees F at many locations around the lake, as alleged, we would concur in the assessment that Dominion appears to be in violation of the U.S. Clean Water Act and the terms of their current 316 variance, which cannot plausibly be interpreted to sanction thermal discharges sufficient to produce overheating of the entire lake. "The purpose of the variance is because the water temperatures in Lake Anna, *in the vicinity of Outfall 001* (i.e. the Dike 3 cooling water discharge point into the main body of the lake) *and in the shallow reaches near its tributaries*, occasionally exceeds the maximum criteria of 32C. Without the variance, Dominion would be subject to enforcement actions" [VA0052451 at 15, emphasis added]. This language does not appear to permit the kind of extensive heating that has occurred throughout the Lake, and suggests to us that Dominion might be subject to an enforcement action even under the terms of its existing variance. What does seem clear, however, is that excessive and heating of Lake Anna is occurring in violation of national standards.

In our view, the North Anna Power Station VPDES permit is one of the "enforceable policies" of Virginia's Coastal Zone Management Program. If the current 316A variance granted by the VPDES has led to overheating of Lake Anna in violation of the Clean Water Act, it follows that any future VPDES permit will probably also be in violation if immediate changes to protect the lake and downstream resources are not made a part of the state's concurrence process for federal consistency certification under the Coastal

Zone Management Program.

We note that there are serious unresolved discrepancies between the Lake Anna water temperature data and monitoring conclusions contained in the draft VPDES Permit of 12/22/05 [Fact Sheet for VPDES Permit VA0052451] and the data and conclusions reached by LACA and FOLA. According to the draft permit, "Except for [the summer of] 2002, the temperatures in Lake Anna did not exceed the 32 deg. C water quality criteria value. By letter dated July 5, 2005, the permittee formally stated that conditions have not changed substantially and thereby requested continuation of the 316 (a) variance." [VA0052451 Attachment 10, at 2.]

These conclusions are disputed by citizens groups that monitor water temperatures in Lake Anna, and we see no reason at this point to discount their independent findings in favor of the applicant's obviously self-interested assertions. The state must resolve this matter before any serious consideration can be given to concurring in a program that seems likely to produce *even further heating* of the lake (through evaporative loss reductions in average lake volume) in violation of CWA standards. If there is considerable uncertainty as to what the true current environmental baseline is, we do not see how anyone can claim to possess an adequate understanding of the incremental impacts on Virginia's CZMA from the addition of Unit 3 cooling to the mix, and therefore we urge that the state continue its objection to federal certification on that basis alone.

We also note that there appears to be a significant and consequential historical error in the permit as currently drafted. Specifically, the draft permit asserts, "The value of 13.54E9 BTU/hr is the limit *originally assigned to the facility in the 401 certification in 1973*, and is what was used in part to design (size) the WHTF. The limit is carried forward since *the design and operating parameters for Units 1 and 2 have not changed* and there have been no water quality problems with the heat leaving Outfall 001."

We believe this statement is most likely incorrect and must be further investigated. In fact, the thermal power of each existing NAPS was "uprated" (increased) by 4.2 percent in August 1986, for a total station increase of 236 MW(t). So the statement that the operating parameters for Units 1 and 2 have not changed since 1973 is incorrect. We note that a recent nuclear industry document cites an analysis performed for the Department of Energy regarding a further 5% uprating of these existing units with once-through cooling.² VDEQ should query Dominion regarding the thermal discharge effects of this potential upgrade before renewing the NAPS VPDES permit and variance or offering its concurrence in the granting of the Early Site Permit for Units 3 and 4.

We further note that the existing 316(a) variance is expressed as permission to discharge an unlimited condenser coolant outflow containing a certain *calculated* amount of reject heat, rather than as permission to discharge a *maximum* flow of x gallons per day that shall not exceed a specific (and continuously *measured*) outfall temperature. Such a

² Nuclear Energy Institute, "Nuclear Energy in Virginia" Factsheet, May 2006, p. 2

loose compliance scheme obviously misses the combined effect on the cooling lagoons from both above-nominal discharges of reject heat and weather-induced heating, and therefore seems prone to chronically underestimating the heat transferred to the main body of the lake at the Dike 3 discharge point. In support of this point, we note that the waters of the Lake Anna cooling lagoons reached 106 degrees on August 3, 2006 as recorded by local residents. The Lake Anna Civic Association (LACA) Water Quality Team recorded 104.6 degrees F at the end of the discharge canal on the same day at a different time.

We are aware of legal arguments advanced by some citizens groups that the Clean Water Act applies both to the main body of the Lake Anna reservoir *and* the diked cooling lagoons, since under the CWA cooling lagoons are considered “navigable waters” of the U.S. In addition, they point to the fact that the U.S. Army Corps of Engineers (USACE) which administers CWA Section 404—Dredge and Fill of Navigable Waters of the U.S.—requires the issuance of 404 permits for dredge and fill activities in the NAPS cooling lagoons. This is necessarily predicated on the determination by USACE that the cooling lagoons are jurisdictional waters of the United States. The “Friends of Lake Anna” (FOLA) assert that the definition for Waters of the United States under the Sec. 404 implementing regulations at 33 USC Section 328.3 is identical in all necessary respects to that of the NPDES regulations implementing 402 (40 CFR Section 122.2)

Thus, FOLA asserts that there is “no question” that the cooling lagoons are waters of the U.S. and as such are subject to three federal regulations:

- (1) 404 (Dredge and Fill of Navigable Waters of the U.S., administered by the U.S. Army Corp of Engineers)
- (2) 402 (National Pollution Discharge Elimination System – NPDES)
- (3) 401 (Water Quality Certifications as administered by VDEQ).

FOLA asserts, “VDEQ and the Virginia State Water Control Board do not have the authority to de-nationalize national waters and designate the Lake Anna cooling lagoons as a waste heat treatment facility....Federally delegated programs such as VPDES can be more stringent than the national program, but cannot be less. The Virginia State Water Control Board cannot arbitrarily exclude U.S. surface waters from the regulatory purview of its delegated national program.”

FOLA wants monitoring of the VPDES permit compliance to begin at the end of the North Anna power plant discharge canal, since the cooling ponds are national waters. FOLA also wants VDEQ to correct the existing VPDES regulations that exempt cooling lagoons from the definition of surface waters. They allege that VDEQ is in conflict with the national program (NPDES – 40 CFR Section 122.2) providing that cooling lagoons/cooling ponds which meet the definition of waters of the U.S. are not waste treatment systems.

We have not yet had the opportunity to conduct the legal research necessary to form an independent opinion as to the strength of these legal claims, but we have noted some

pertinent facts. The lagoons are navigable, not otherwise polluted except thermally,³ and are fed by the waters of some eight creeks and streams, in addition to the coolant water pumped from Lake Anna, and these waters ARE presumably exempt from appropriation as "private waters" not subject to regulation under the CWA. So irrespective of the legal merits to the claim that the State has erred in continuing to designate the lagoons as a private "Waste Heat Treatment Facility," Dominion cannot plausibly have it both ways, claiming these waters are indeed private, but then evading strict monitoring of CWA compliance at the Dike 3 point where these waters discharge into the regulated surface waters of the United States.

If VDEQ is unwilling to revise its longstanding regulatory approach to treating the lagoons as an unregulated "Waste Heat Treatment Facility," then at a minimum a strict CWA-compliant regime for detecting and preventing excessive heat loads and temperatures must be established at the Dike 3 discharge point to ensure that Lake Anna and the North Anna-Pamunkey river system are adequately protected. Such a regime must be in place and operating reliably before any concurrence is given to the ESP for Units 3 and 4. The existing poorly monitored variance appears to be nothing more than a license for Dominion to save money by spreading the burden of dissipating its thermal discharges where it doesn't belong, on the protected surface waters of the United States.

8. The NRC's Early Site Permit Review Process is Defective and Hinders Meaningful Participation by the Public.

The NRC has either deliberately devised or negligently allowed the ESP process to evolve in a way that overtaxes and bamboozles the public and even state regulators with a continuing and chaotic blizzard of ever-changing project documentation.

We note that the *Friends of Lake Anna* (FOLA) and others attempting to participate meaningfully in the process have definite objections to the way the NRC has chosen to conduct its review. As longstanding participants in the NRC's proceedings, we can only concur in the objections raised by FOLA to the current process:

"The NRC does not provide for any public scrutiny of a draft Safety Evaluation Report prior to its issuance. The public's safety should be the primary focus of any government agency. The public's review of any safety projects is essential. *It appears the NRC is basing decisions on 5 year old data and has not considered recent property development around the lake or world events in any of their decision making.* The NRC's staff projected population increase for the North Anna site through 2065 is not anywhere in the ballpark, Louisa County is currently the 73rd fastest growing county in the U.S.

"*The NRC continues to accept many changes to the ESP, without automatically extending the public comment period each time a change is issued.* Currently we are reviewing Revision 6 to the North Anna ESP, which is over 1,000 pages of technical data. In addition, just last month (July 2006) you issued

³ Except that elevated levels of PCB's have recently been found in fish that inhabit the lake, and the source of this pollution has not yet been identified.

a supplemental Draft Environmental Impact Statement relating to Revision 6 only, that was about 500 pages, which related to your first draft Environmental Impact Statement which was another 600 or 700 pages. You have also just within the past few weeks, issued Revision 7 and a Revision 8 with no automatic extension of the public comment.

“While the Draft Environmental Impact Statement (DEIS) is still under review, Dominion continues to make revisions to issues that are analyzed [in the DEIS]. Hence our review of the DEIS is a moving target, without the NRC automatically extending the public comment period and giving the public sufficient time to review the changes. (emphasis added)

“It seems like everyone is spinning wheels in trying to keep up with all the Dominion and NRC revisions, Requests for Information, Responses for Request for Information, additional revisions, draft environmental impact statements that pertain to the earlier revision only, and [this] is making a mockery of an extremely important governmental process....”⁴

We would hazard a guess that the logistical, analytical, and sheer time demands of keeping up with the NRC’s chaotic permit review process have deterred many citizens from participating in it at all, and discouraged others as soon as they became aware of its daunting demands and perverse complexity. The process effectively excludes anyone from meaningful participation who does not have the patience, time, and particular skill set to wade through the documentary swamp the NRC has generated. While our review stops at Revision 6 of the ESP, we understand that Dominion has recently submitted Revisions 7 and 8. As we have other things to do in our professional lives besides track the NRC’s paper trail, we are unable at present to comment on those revisions. But given the NRC’s conduct in this matter, we obviously feel that VDEQ is entitled to treat the date of the last revision as constituting a new Dominion certification of federal consistency under the CZMA, and to extend the concurrence response date accordingly.

9. The NRC’s Site Comparison Methodology is Flawed and Obscures Important Environmental Advantages of Alternative Sites. We are far from persuaded by the NRC staff determination that another site is not “obviously superior” on environmental grounds to the North Anna site, and note that this criterion begs the question of whether one or more alternative sites may be merely “superior” on environmental grounds to the North Anna site. The NRC criterion employed in assessing whether a proposed ESP site should be rejected in favor of an alternative site is whether the alternative site is “clearly and substantially” superior to the proposed site. Under prior NRC rulings, a proposed ESP site may not be rejected in favor of an alternative site when the alternative is “marginally better” than the proposed site, but only when it is “obviously superior.”

According to the NRC, an “environmentally preferred” alternative site is “a site for which

⁴ Presentation of Harry Ruth on behalf of the *Friends of Lake Anna* to the U.S. Nuclear Regulatory Commission public hearing on August 15, 2006 at Louisa Middle School, Louisa, Va., p. 2.

the environmental impacts are sufficiently less than the proposed site so that the environmental preference for the alternative site can be established" (NUREG-1811 SDEIS, p. 9-1, citing NRC proceedings from 1978). If the Early Site Permit EIS process identifies one or more such "environmentally preferred" sites, then to uncover an "obviously superior alternative site," the NRC staff then believes it must further determine that "(1) one or more important aspects, either singly or in combination, of a reasonably available alternative site are obviously superior to the corresponding aspects of the applicant's proposed site" and (2) the alternative site does not have "offsetting deficiencies" in other important areas. A staff conclusion that an alternative site is "obviously superior" would normally lead to a recommendation that the application for the ESP at North Anna be denied.

Since the NRC staff employs inherently fuzzy qualitative – "SMALL," "MODERATE," and "LARGE" – rather than quantitative criteria to compare environmental impacts at the alternative sites, this allows important differences between sites to be obscured by choosing "MODERATE" to describe harmful impacts at the Proposed Site that are actually environmentally significant, while "offsetting deficiencies" at alternative sites – such as visual impairment of an historical view shed, can subjectively be described as "LARGE" (without considering design or mitigation alternatives) thereby eliminating any prospect of ever making an "obviously superior" determination for an alternative site.

Aside from this sloppy methodology, which seemingly allows the NRC staff to recommend any site Dominion prefers short of causing an obvious environmental catastrophe, the NRC's NEPA process raises three sets of legal issues:

(1) Has the NRC's shoddy ESP process violated citizen's due process rights under the Administrative Procedures Act, the National Environmental Policy Act, and NEPA's implementing regulations;

(2) Has the NRC's tailored alternatives analysis unreasonably failed to identify one of Dominion's alternative sites – such as the existing Surrey Plant on the lower James River – as "obviously superior" to the proposed North Anna site, when both the impacts of heat dissipation and water withdrawal at the Surrey site, and possibly other sites, are clearly less than they are at North Anna; and

(3) has NRC correctly analyzed – or indeed performed ANY analysis – of the vulnerability of the North Anna site to both climate change and terrorist threats – i.e. what are the impacts if the lake steadily dries up in a future local climate of reduced rainfall and higher than average temperatures, and what are the impacts if terrorists manage to blow a hole in the dam, suddenly draining the lake and disabling the three units that depend wholly or in part on cooling water withdrawals from the lake, or attack the spent fuel storage pools.

Analysis of the climate change scenario seems indicated given the projected 60 year life span of a reactor and the recent spate of reactor cooling problems triggered by heat and drought conditions in Europe and the Midwestern U.S. And a recent 9th Circuit Court decision directing the NRC to analyze the reasonably foreseeable environmental impacts of a terrorist attack on a California reactor's spent fuel storage facility suggests that such analysis should be part of the NEPA coverage for the North Anna ESP. The lack of these analyses in the present DEIS and SDEIS is yet another substantive reason

14

for the State to object to Dominion's certification of federal consistency for the ESP.

Please do not hesitate to contact me if you have any questions regarding these comments.

Sincerely,

Christopher E. Paine
Senior Analyst, Nuclear Program
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14

October 23, 2006

Mr. Thomas Felvey, FOIA Officer
Virginia Department of Environmental Quality
P.O. Box 1105, Richmond, VA 23218
tmfelvey@deq.virginia.gov
Fax at 804-698-4266
Tel: 804-698-4315.

Dear Mr. Felvey:

This is a request under § 2.2-3700 of the Code of Virginia, "The Virginia Freedom of Information Act," for copies of all public records, generated from August 16, 2006 to the date of receipt of this letter, including any emails, calendars, appointment records, written correspondence, memorandum of conversations, meeting minutes, teleconference videotapes, transcripts, staff directives, and any other records of communications generated or received by senior VDEQ employees—or exchanged between VDEQ employees and : (a) any official or employee of Dominion Resources Corporation or its subsidiaries, attorneys, or representatives; or (b) any official or employee of any federal, state, or county government agency or office—*which discuss, mention, respond to, transcribe, summarize, report on, or are in any way concerned with the following:*

(a) the request by Dominion Resources Corp for the State's concurrence in Dominion's certification that the revised terms of its draft Early Site Permit for up to two additional nuclear reactor units at the North Anna Power Station (NAPS) are consistent with the enforceable policies of Virginia's Coastal Zone Management program;

(b) public, VDEQ staff, or other government agency expressions of concern regarding the environmental impacts of one or more additional reactor units at NAPS

(c) non-public meetings since August 16, 2006 between Dominion representatives and VDEQ officials, including those that may have been held secretly outside the state of Virginia, to discuss the State's possible concurrence or objection, on or before Nov. 3, 2006, to Dominion's certification of federal consistency under the CZMA for the revised terms of its Early Site Permit currently pending before the Nuclear Regulatory Commission

NRDC FOIA/page 2

(d) the letter dated October 2, 2006 from Environmental Impact Program Review manager Ms. Ellie Irons to the federal Environmental Protection Agency (EPA), seeking EPA review and advice on legal and other environmental matters raised in public hearings and comments on the revised draft Early Site Permit and its potential environmental impacts on the CZMA.

(e) the letter, dated October 6, 2006, from VDEQ Director David K. Paylor to the Virginia Attorney General Robert F. McDonnell secretly requesting "an official opinion" on only one of the legal issues raised in the Oct. 2 VDEQ public concerns letter to EPA, which EPA reports was swiftly and secretly recalled by an unnamed senior VDEQ official, who labeled it an "unauthorized" action by a "rogue employee" that required no response from EPA.

The Natural Resources Defense Council is national nongovernmental environmental organization acting on behalf of over a million members and online activists, some of whom live in Virginia. I understand that under Virginia's FOIA statute, I am entitled to an initial response to this request within five working days.

Sincerely,

Christopher E. Paine
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cc: Bob Gibson, Daily Progress
The Honorable Timothy M. Kaine, Governor of Virginia