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July 27, 2007

Mr. Doug Scott  
Director  
Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276

Re: Dominion Kincaid Comments on Illinois Climate Change Advisory Group

Dear Mr. Scott:

Dominion is one of the nation's largest producers of energy. Dominion owns and operates electric generating facilities in ten states, including the 1250 megawatt coal-fired Kincaid Generation LLC power plant, located in Kincaid, Illinois. Dominion also owns a 50% interest in the 1400-megawatt natural gas-fired Elwood Energy, LLC combustion turbine plant, located in Elwood, Illinois. Thus, Dominion has a significant stake in the current deliberations of the Illinois Climate Change Advisory Group (ICCAG), which has been charged by Governor Blagojevich's Executive Order 2006-11 with the task of presenting to the Governor its "findings and recommendations" to reduce statewide greenhouse gas emissions. This Advisory Group must develop these recommendations in only four months "after fully considering the full spectrum of policies and strategies regarding climate change."<sup>1</sup>

Although Dominion is not an official stakeholder member of the ICCAG, we have been closely monitoring the progress of the ICCAG through participation under "observer" status in the group meetings and various subgroup conference calls. Since the ICCAG has not established a specific mechanism for "observers" to provide direct input into this process, we are submitting the following comments on the Advisory Group process as it has progressed so far. We would also like to take this opportunity to request that the ICCAG establish a more formal mechanism for all stakeholders to provide timely input into the process as well as an opportunity to comment on any recommendations the group ultimately proposes to the Governor for possible consideration.

### **Comments Pertaining to the Development of an Illinois State-Level Climate Change Program**

- 1. Dominion urges Illinois to consider how best to prepare for a national climate change program in lieu of developing a state-specific program.**

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<sup>1</sup> "Executive Order on Climate Change and Greenhouse Gas Reduction", 2006-11, Executive Department, State of Illinois, October 5, 2006.

Climate change is one of the most challenging environmental policy issues ever. Rather than pursuing a one-state program, Dominion urges the State of Illinois to develop a well-researched, fully documented program that allows the citizens and industries of Illinois to be fully prepared for what we believe is inevitable – a national greenhouse gas (GHG) reduction program. Only with a national program can we ensure a fair distribution of the economic impacts any carbon constraining program is likely to create. States should focus on: (1) developing comprehensive greenhouse gas emission inventories in order to fully understand and evaluate current sources of GHG emissions as well as past and future anticipated trends of GHG emissions; (2) study the potential impacts of climate change on the state, and evaluate strategies, in coordination with all impacted entities, that can be reasonably and cost-effectively deployed in terms of addressing GHG emissions and adapting to climate change outcomes, if needed, and; (3) influencing the development of federal policies that will address climate change concerns.

These are complex, long term issues and while we applaud Illinois for getting started, we strongly urge the State of Illinois to re-direct the extensive resources that are currently being expended in pursuit of an Illinois-specific climate change program to a concerted effort to better position the State of Illinois for a national greenhouse gas program.

- 2. As part of a state response to expected federal climate change legislation, Illinois should identify state-specific strategies that focus on how Illinois can best achieve the expected reductions.**

Illinois Executive Order 2006-11 directs the ICCAG to “provide recommendations to the Office of the Governor regarding climate change policy” and to “present proposals to the Governor to reduce statewide greenhouse gas emissions”.<sup>2</sup> The ICCAG has chosen to expand this charge from providing policy recommendations and emissions reductions proposals to focusing on specific reduction targets and timetables, choosing reduction options from a pre-prepared list by taking a popular vote of the ICCAG members.

Dominion believes the citizens of Illinois would be better served by an Illinois GHG program that devoted its initial deliverables to a high-level review of the areas of the Illinois economy that are likely to be most impacted by the expected federal climate change legislation and identifying those areas best equipped to achieve the expected GHG reductions in the most cost effective manner.

For example, Dominion has been carefully monitoring the federal climate change debate and believes a national climate program should include:

1. Programs and incentives to promote energy efficiency, conservation measures and renewable power;
2. Incentives to increase nuclear capacity;
3. Continued development and deployment of clean coal technology, and;

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<sup>2</sup> IBID

4. Phased-in targets and timelines that slow and stop the growth of GHG emissions in the near term to allow adequate time for the development of the advanced technologies that will be needed to reduce GHG in the longer term.
3. **A well-researched state climate change program will need more time to develop and should be conducted in concert with federal legislation.**

Dominion has significant first-hand experience in working through the problems inherent with developing a regional greenhouse gas reduction program since Dominion owns and operates three fossil power plants in New England that will be subject to the Regional Greenhouse Gas Initiative (RGGI) – the ten-state Northeast regional greenhouse gas program. It has been noted throughout these initial discussions in the ICCAG that it took much longer to finalize the RGGI program than the four months allocated for the Illinois program. New York’s Governor Pataki proposed what eventually became known as “RGGI” in April 2003. Though a final Model Rule was issued in September of 2006, states are not expected to fully adopt the program until sometime in 2008 with implementation in 2009 – 6 years after the initial announcement. Furthermore, some of the outstanding policy issues raised in RGGI, such as how to effectively address leakage, have yet to be resolved. We also note that the State of North Carolina was commissioned through legislation that passed in June 2002 to undertake a comprehensive 2-year study to evaluate climate change impacts to the state and to develop recommendations to address greenhouse gases. It wasn’t until September 2005 that the Final Report was issued, more than three years later.

Dominion believes there is too much at stake here from an economic and electric reliability perspective to fit the currently contemplated timeline. The issue deserves a thorough review of the many impacts this program will have on the citizens of Illinois. We respectfully request the group be given at least a year, or longer, to more fully evaluate the policy options and the impacts of this undertaking.

As you are aware, the ICCAG has decided to prioritize the number of policy options for consideration towards achieving the Governor’s objectives by having the ICCAG members “vote” on their “top five” policies they believe should be included. Decisions this critical that will inevitably have a profound impact on the economy of Illinois require that the policy options be thoroughly evaluated and considered by experts in this field, and only after careful, objective, economic and scientific review and an open stakeholder process.

### **Comments on State-Level Cap-and-Trade Program (Policy #16)**

1. **The “straw proposal” for a cap and trade program targets only electric generating units (EGUs) and large fossil fuel fired combustion units. A fair cap and trade program would include all sectors of the economy – including all generators of**

**greenhouse gases as well as all end-users of the products provided by these generators.**

It is clear that the focus of the group is “fossil fuel fired electric generation units“ and “large fossil fuel fired combustion units” as the original cap and trade proposal called for reductions from these sources to be “equal to the difference between the Governor’s 2020 goal and the cumulative projected reductions from the other strategies recommended by the ICCAG.” In other words, under this cap and trade option, EGUs (and “large fossil fired combustion units”) will make up the difference between the reductions that all the other options achieve by 2020 and the projected 88 million metric tons of reductions needed by 2020. We support the ICCAG decision to abandon this option and we agree with the reasons given by the IEPA staff at the July 10 meeting that this approach would be “unfair”.

The cap and trade option now under consideration by the ICCAG would target the same sources but would cap GHG emissions from these sources at 1990 levels, beginning with a freeze in 2012 at 2011 levels and then a gradual reduction to 1990 levels by 2020. According to IEPA’s “best guess” projections, GHG emissions from Illinois sources will increase to 326 million metric tons by 2020. The ICCAG estimates that this cap and trade option would cap GHG emissions from these sources at 72.6 million metric tons in 2020, and about 56 million metric tons for EGUs. If you assume the EGU sector comprises 30% of the total, the 2020 GHG emissions from EGUs could be estimated at about 98 million metric tons, meaning EGUs would need to reduce GHG emissions by 42 million metric tons – or almost 50% of the expected 2020 reduction.

Illinois is a coal-rich state, and the Governor has pledged to revitalize the Illinois coal industry, which has been in steep decline since implementation of the federal acid rain program in the 1990s. The current cap and trade “straw proposal” would severely impact coal-fired facilities in Illinois. A recent Massachusetts Institute of Technology (MIT) study of the economic impacts of a range of cap and trade proposals introduced in the U.S. Congress indicates cap and trade proposals similar to the one suggested for Illinois (reduce GHG emissions to 1990 levels by 2020) could increase coal prices by 207% above 2005 levels.<sup>3</sup> Imposing these levels of control within the timeframes proposed would not be commensurate with a goal to revitalize the Illinois coal industry. The targets and timetables do not meet the proposal’s objective of “reducing emissions **gradually** to meet the 1990 level target in 2020” (emphasis added) since they would require reductions up to 50% by 2020.

Any greenhouse gas program should take into account the time and funding required to develop and implement the technologies that will be necessary to reduce greenhouse gas emissions. There are currently no viable back-end control technologies to cost-effectively reduce CO<sub>2</sub> emissions from power plants, and it will take time and huge investments to develop them or to replace existing generation with new generation. There is also a

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<sup>3</sup> S. Palsev *et al.*, “Assessment of U.S. Cap-and-Trade Proposals,” (MIT Joint Program on the Science and Policy of Global Change, report No. 146, April, 2007.)

question of how the reductions will be achieved – no strategy should be developed without examining the potential solutions.

- 2. The cap and trade proposal suggests that 85% of the credits should be auctioned. EGUs would then have to reduce greenhouse gas emissions (or secure credits) to 1990 levels as well as finance the ability to operate at 85% of 1990 levels. This may jeopardize the long-term economic viability of many EGUs currently operating in Illinois.**

The Illinois allowance pool should not be cut by 85% through a public benefits auction or other set-asides. Requiring generators to purchase a significant number of allowances is an unproven policy mechanism, which could be enormously costly for the electric sector and consumer rates. We suggest starting slowly with a small percentage of auctioned allowances at the onset of the program with a gradual transition to the levels being considered over time. This would provide an opportunity to adequately evaluate the impacts of auctions and the time needed to develop mitigation measures and to modify or adjust the program if needed to address deficiencies.

To the extent allowances are set aside, they should be made available to the market immediately. Auctions should be conducted in a timely manner, well in advance of the allowance “vintage year” in order to provide generators time to procure the allowances needed to meet their compliance obligations and provide certainty to business planning. States should work very closely with their ISO’s concerning the structure of an auction process and seek input from all interested stakeholder in its development process.

In addition, auctions should be limited, at least at the start of the program to generators to prevent potential market manipulation by third party entities without compliance obligations. Generators could be provided a “right of first refusal” for auctioned allowances. Trading entities would be able to participate in any trading that occurs afterwards.

The MIT report also estimates allowance prices for a GHG reduction program like the one envisioned for Illinois could be as high as \$50 by 2020.<sup>4</sup> If the cap and trade program envisioned by the ICCAG included 40 million of the 65 million metric tons from EGUs after implementation of the Governor’s Energy Independence Plan, it could cost Illinois EGUs as much as \$2.0 billion per year – just to get down to 1990 levels (assuming the credits were even available). The 1990 levels of greenhouse gases from EGUs were 56.3 million metric tons (according to the Illinois data). If EGUs need to secure 85% of this total through auctions, it would cost EGUs another \$2.4 billion – for a total of \$4.4 billion each year.

- 3. The cap and trade proposal expressly excludes any price caps on allowances “to ensure that the Governor’s reduction goals are met”. To provide some allowance**

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<sup>4</sup> IBID

**price protection for facilities subject to the Illinois GHG program, a price control mechanism should be established.**

Dominion would recommend a price control mechanism for any cap and trade program that may be considered. This will facilitate an orderly transition to a new program and, while it would not avoid rate impacts, it would provide affected companies and their ratepayers greater rate stability. An allowance and offset price control mechanism, which acts as a "safety valve" is critical to protect consumers, operators and the reliability of the market until technology can provide a cost-effective solution, particularly since technology currently does not exist on the necessary scale to capture and store CO<sub>2</sub> from power plants or industrial sources economically.

Additionally, a price cap would provide a necessary mechanism for government funding of technology research and development, conservation and demand side reduction programs, provided the necessary steps are taken to ensure that the funds collected are secured for their intended purpose. Finally, proceeds from a safety valve could also be used to fund efficiency upgrades, technology R&D and demonstration projects at facilities subject to the program.

**4. Any ICCAG proposal must include robust and unrestricted opportunities for offsets.**

Any mandatory GHG reduction program must allow a robust menu of offsets including unit shutdowns, biomass fuel burning, beneficial use of coal ash and coal bed methane capture. Offsets are critically important to minimize compliance costs, particularly in programs that do not cover all greenhouse gases, because they provide realistic compliance options. A program focused exclusively on the electric generation sector should allow GHG reductions achieved through off-system projects such as reducing leaks in natural gas transmission and distribution systems to qualify as offsets.

In addition, offset criteria and eligibility requirements should be well clarified in advance of the program and crediting allocation periods must be of sufficient length to both incentivize and justify project financing.

We commend the ICCAG for its general recognition that the program should allow for a wide range of eligible offset projects. However, the amount of offsets that can be used for compliance in each compliance period should not be limited as proposed. Nor should there be any geographical constraints imposed on the source or use of offsets, allowing Illinois companies the opportunity to acquire the most cost effective offsets while still ensuring real, verifiable, and quantifiable carbon reductions.

**5. The cap and trade "strawman" includes recognition for early action. These provisions should be as flexible as possible and be designed to award measures dating back to the time period from which the program's established reduction targets are based on.**

We are pleased that the “strawman” proposal will award covered sources for GHG reductions they have achieved prior to implementation of the program. To the extent the target for GHG reductions is to reduce to 1990 levels, the early action credit provisions in the ICCAG proposal should allow credit back to 1990 for investments in voluntary measures companies made to reduce emissions. They should include reductions reported or registered in established GHG reporting programs or GHG registries, such as 1605(b). Unrestricted early compliance banking and exchange between parties subject to the program is also essential to ensure market liquidity and preserve system reliability.

## **6. Linkage**

The “strawman” proposal appears to favor an independent cap-and-trade program separate from other state-level or regional programs. As stated previously, we believe the scope of any domestic climate change mitigation policy should be at the national level and that a more reasonable approach would be for the efforts of the ICCAG to evaluate and determine how to influence the development of a national program that would address GHG emissions while protecting the state’s interests. To the extent that Illinois does pursue state-level action, the program should provide some means of linking with other state and/or regional GHG emissions markets in order to provide additional compliance flexibility for affected sources and minimize compliance costs.

## **7. Leakage**

The “strawman” proposal appropriately recognizes the likely potential for emissions leakage and indicates that subsequent to the recommendations of a leakage workgroup, steps would be taken to minimize emissions leakage during program design and implementation. To the extent that Illinois does embark on a state-level GHG emission mitigation policy, we strongly encourage the Agency to adhere to an approach that would thoroughly evaluate the potential impacts of emissions leakage and means of addressing leakage through a stakeholder workgroup process during the design phase of the program. It is important that measures to address leakage be in place in parallel with the implementation of the state climate program so that any near term reductions achieved in state are not compromised by emissions increases from neighboring states.

## **8. Modeling the economic impacts of a regional GHG reduction program is critical prior to decision making.**

At the time of these comments, the ICCAG Modeling Subgroup has less than 45 days to finalize results of modeling the impacts expected from implementation of the GHG reduction scenarios selected by the other subgroups. In mid-May, the Modeling Subgroup selected ICF International to conduct the modeling and on May 21, ICF submitted the model documentation for the ENERGY 2020 model, “an integrated multi-region energy

model that provides complete and detailed, all-fuel demand and supply sector simulations.”<sup>5</sup>

The May 29 ICCAG Cap and Trade Subgroup conference call was devoted entirely to a discussion of a long list of input questions apparently prepared by ICF, which was sent to a limited number of IEPA and WRI staff shortly before the call. No other subgroup participants were provided a copy of these input questions. There was not sufficient time provided for participants to prepare to respond to these questions. This is not commensurate with the “transparent” process WRI and IEPA assured the ICCAG at the outset of these meetings.

Illinois citizens and stakeholders deserve a careful review of the predicted impacts of this program. The ICCAG needs more time for a more comprehensive discussion of this critical part of the process.

### **Comments on the Carbon Offset for Electric Generation Proposal (Policy #12)**

#### **1. The ICCAG proposal for carbon offset for electrical generation (Policy #12) will create a disincentive for development of new coal-based technologies in Illinois.**

The ICCAG Cap and Trade Subgroup has been discussing Policy #12 – Carbon Offsets for Electric Generation. This policy option would require that all GHG emissions from new electric generating facilities and from existing electric generating facilities that undergo “modification” be offset by approved credits. The subgroup has derived this option from the State of Washington program. However, instead of the 20% offset requirement of the Washington program, the Cap and Trade Subgroup is considering a 100% offset requirement for affected sources.

A new 630 megawatt coal-fired IGCC (integrated gasification combined cycle) design power plant, like the Taylorville facility recently announced in central Illinois<sup>6</sup>, is estimated to have CO<sub>2</sub> emissions of about 1673 pounds per megawatt-hour.<sup>7</sup> At this rate, CO<sub>2</sub> emissions would equal approximately 3.8 million metric tons per year. If 100% of these emissions must be offset, and the price for these offsets are not capped, and the offset prices rise as high as the MIT report estimates, securing offsets could add another \$188 million to the annual operating costs of the new plant (or \$37.6 million if 20% of the CO<sub>2</sub> emissions must be offset). Even if an allowance price cap were set at \$10.00/metric ton CO<sub>2</sub>, the costs for offsetting 100% of the CO<sub>2</sub> emissions from a 630 megawatt IGCC plant would be \$38 million per year.

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<sup>5</sup> “Climate Change Strategy Modeling for the State of Illinois”, ICF Consulting Canada, Inc., Toronto, ON, May 21, 2007.

<sup>6</sup> Illinois Government News Network, Press Release, “Gov. Blagojevich announces landmark air permit for clean-coal gasification power plant in Taylorville”, June 5, 2007

<http://www.illinois.gov/PressReleases/ShowPressRelease.cfm?SubjectID=1&RecNum=6017>

<sup>7</sup> “Integrated Coal Gasification Combined Cycle (IGCC) Power Plants and Geologic Carbon Sequestration”, Presentation by Joe Chaisson, Clean Air Task Force, April 21, 2004.

A recent DOE report provides the latest estimates of IGCC operating costs.<sup>8</sup> The estimated average of the annual levelized costs (excluding capital) is approximately 33 mills per kilowatt-hour. At a 90% capacity factor, these annual costs would be expected to be approximately \$164 million. Developers seeking to locate in Illinois will no doubt have to weigh very carefully the costs associated with a CO<sub>2</sub> offset requirement that could cause their annual operating costs to increase by more than 20% or even to double the annual operating costs that would be expected in other states.

### **Concluding Remarks**

Section 15 of Chapter 415 of the Illinois Compiled Statutes prohibits adoption of new rules to address climate change.<sup>9</sup> Regulatory action on GHG emissions will require legislative action to modify this current statute. Dominion looks forward to continuing to work closely with the ICCAG in the context of evaluating how Illinois can influence and then best comply with a national GHG reduction program. To the extent state-level options are pursued, only low-cost options, such as the in-state energy conservation and efficiency options under consideration by the Advisory Group and energy efficiency measures of the Governor's energy plan, that would not place Illinois at an economic disadvantage relative to surrounding states, should be considered in advance of a national GHG program.

Thank you for your consideration of these comments. If you have any questions, please contact Bob Asplund at (804) 273-3012 or Lenny Dupuis at (804) 273-3022.

Respectfully,



Pamela F. Faggert

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<sup>8</sup> "Cost and Performance Baseline for Fossil Energy Plants", DOE/NETL-2007/1281, May 2007.

<sup>9</sup> "Restrictions on State rules related to greenhouse gas emissions.

(a) Effective immediately, the Environmental Protection Agency and the Pollution Control Board shall not propose or adopt any new rule for the intended purpose of addressing the adverse effects of climate change which in whole or in part reduces emissions of greenhouse gases, as those gases are defined by the Kyoto Protocol, from the residential, commercial, industrial, electric utility, or transportation sectors. In the absence of an Act of the General Assembly approving such rules, the Director of the Environmental Protection Agency shall not submit to the U.S. Environmental Protection Agency or to any other agency of the federal government any legally enforceable commitments related to the reduction of greenhouse gases, as those gases are defined by the Kyoto Protocol."

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