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22. Yes to Electric Reliability

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Yes to Electric Reliability

Mr. Ralph M. Hunt writes: “I support the call for reasonable solutions to provide reliable, affordable energy while also protecting our air quality, so I finally decided to get involved.”

Alice Bertele writes: “This letter is to share my fear and frustration about how our City Council is gambling with our environment, health, and more than \$3 million just for the sake of political rhetoric ... Instead of grasping reality, the City Council is playing politics by fighting the Potomac River Generating Station and in doing so, they are actually preventing innovative improvements to our air quality that the plant owner, Mirant, has proposed.”

The letterhead on both notes bears the imprint Bright Ideas Alexandria, a firm hired to promote a positive image of Mirant in the community and garner support for their proposed stack merger. Ralph, for all I know, may be fictional—no Ralph M. Hunt is listed in the Alexandria white pages. A seventy-year-old resident, Alice Bertele exists, but I wonder how well-informed she is about the lawsuit between Mirant and the city of Alexandria. A brochure sent out to local residents depicted a father swinging his daughter in front of a backdrop of blue sky. “A Plan for Better Air Quality” was printed along the bottom.

I accepted the invitation in one of these letters to attend a public hearing before Virginia’s Air Pollution Control Board. The Potomac River Generating Station’s operating permit was due to expire a month later in June 2007, and both plant employees and Alexandria residents would have the opportunity to voice their positions. Mirant was sponsoring an open house in a nearby Tex-Mex restaurant, where plant employees mingled with local residents to talk about the plant and dig into plates of flautas, chicken wings, and quesadillas. Employees bunched together in

the leather booths at the restaurant. Most were men, lounging in ball caps and golf shirts. I was one of the few from the community. Another city resident had nothing better to do. One was unemployed. One was curious. The majority had no clear sense of the issue Mirant was recruiting us to defend.

Within an easy reach of the flautas, I sat across from Misty Allen, the young lawyer who had presented with Mike Stumpf at the plant's open house. Just out of law school, she was friendly and disarming. She smiled often and nodded as if she were confiding in a few close friends. "If people build houses around the airport, people complain about the sound when the planes come over. It's about the right to do business. Mirant was here first, and the community was built up around. It's very American to claim that something is somebody else's fault."

"I'd just rather they burn the coal here than do it in West Virginia. You lose energy over transmission lines," responded the man sitting next to me. He was good looking and about my age. New to the area, he was the one still looking for a job.

He had a point. The most recent statistic, compiled in 1995, estimated a total loss of 7.2 percent for electricity distribution and transmission in the United States, which seems minimal until you realize at the rate of supplying half the needs of the energy grid, this equals 37.5 million tons of coal. I too would rather we suffer the consequences of our own energy consumption. As the Potomac River plant served Maryland and D.C. residents and the federal government, Alexandria was paying the price for somebody else's energy. Dominion Resources, a company headquartered in Richmond, Virginia, provides Northern Virginia's power supply, and somewhere another Virginian community is breathing the byproduct of our electricity.

Mirant is fond of saying it's been around since before the city was built up around it, and this is partially true. Although the plant was constructed in 1949, the current owner obtained the facility in 2000. When Mirant bought the generating station, it was well aware that it was grandfathered. The Clean Air Act was passed in 1970, placing caps on the noxious emissions of sulfur dioxide, nitrogen oxide, particulate matter, ozone, carbon monoxide, and lead. At the time, coal-burning plants contended that requiring preexisting facilities to comply presented an unreasonable financial burden. Legislators, believing that eventually these plants would be retired, granted the exception.

Instead of abandoning the old facilities, the coal industry has continued to operate them. Building a power plant is an expensive endeavor; it takes years to recoup the initial investment. Because the Clean Air Act exempts grandfathered plants from pollution controls, these older plants are also less expensive to run. Consequently, for the equivalent of

a matter of pennies per household per month, half of the coal burning plants in America are still spewing the same amount of pollution into the atmosphere as they did prior to the environmental movement. Coal fired plants are responsible for emitting 22 percent of the nitrogen oxide, 60 percent of the sulfur dioxide, 33 percent of the mercury, and 40 percent of the carbon dioxide in our air. A whole century of progress is yet to be implemented in the electricity industry, and half of all Americans breathe air that doesn't meet ambient air quality standards.

Mirant knew very well that buying the Potomac River Generating Station was a cost-saving endeavor. It was a business decision based on financial considerations, regardless of the unhealthy consequences for the surrounding residents. Compared with new coal burning plants, a plant built in 1949 is ten times more polluting. Since the Clean Air Act was implemented, sulfur dioxide emissions have decreased by 77 percent; nitrogen oxide, by 60 percent; and particulate matter, by 96 percent. As a result, the EPA estimates the US public has saved forty-two dollars in health care costs for every dollar spent on pollution controls for every year from 1970 to 1990. This is a cause for celebration and a case for effective legislation; however, it also reveals the sharp correlation between health and air quality, and how much more remains to be done. It demonstrates the money required to retire old facilities are dollars well spent. It's an investment in public health that proves to be ultimately less costly to consumers who bear price of upgrading anyway.

I walked over to the hotel where the hearing was being held, conversing with the water engineer for the plant. A tall polite, well-mannered man, he explained his role at the plant: "I do all sorts of chemical tests and adjust the pH before the water goes back in the river."

"Are any chemicals released into the river?"

He looked at me suddenly and suspiciously. "Well, nobody's perfect."

At the hearing, I situated myself behind the handsome man from the restaurant, who had taken a seat next to an elderly couple.

"Is this meeting for or against the plant?" the woman asked him, her voice cracking a little.

"It's a hearing, I think, for both sides," he responded.

"We've just come to see what the meeting's all about. Do you come to these often?"

The parties for and against lined up on either side of the hotel meeting room. Mirant's supporters wore "Yes to electric reliability" stickers and yellow cardstock light bulbs on golf shirts. The residents of Alexandria wore suits. From the looks of it, it wasn't just an argument between public health and business; it was a conflict divided along class lines. Alexandria has become more affluent over the years. Old Town, just down the river from Mirant, is one of the most expensive and picturesque neighborhoods

in Northern Virginia. Retired people and yuppies who work in D.C. stroll down the cobbled sidewalks with their dogs, past the best dining in Northern Virginia. Along the waterfront on summer days, people eat ice cream and stretch out on blankets on the grass. Alexandria supports one of the few artists' communities in the greater Washington area and puts on a yearly art festival. During the winter, Christmas lights on trees brighten King Street, the main commercial drag.

The majority of Mirant's employees had worked at the plant for at least seventeen years, and many had lived in Alexandria's neighborhoods. By the time of the hearing, a number had moved out. Usually this sort of trend in an industrial area indicates that the financial prospects of industrial employees have improved, but that is not the case here. The majority of Mirant's workers are blue collar, having entered the energy industry right out of high school. Many of the new residents of Alexandria are white collar and rent or own homes whose property values have skyrocketed out of the pay range of the employees of the neighboring plant.

Among plant workers and city residents sat young adults dressed in grunge: interns and new hires from local environmental groups. Here and there were men in the most tailored and blackest suits, lawyers from the District representing the national government.

Vice-Mayor Adella Pepper was one of the first to speak. A member of the Mirant Community Monitoring Group, she had been heavily involved in the issue since Mirant was shut down in 2005 in response to a warning from Virginia's Department of Environmental Quality (DEQ) when it was discovered the plant was emitting fifteen times the amount of legal SO₂.

Del, a small woman with pale orange hair, seemed like the sort of person who led a pep squad fifty years previously at one of the local high schools. Emanating spunk and intelligence, she started into her speech with calculated vehemence: "I've been a member of the Alexandria City Council for the past twenty-two years, and in all my years in public service, I have not seen a greater public issue than the one that is before us today—that is, ensuring that the operations of the Potomac River power plant are no longer injurious to the health of Alexandria's residents and guests. There are about twelve thousand people living within a mile of the plant and twenty-five thousand people living within one and a half miles. I've never seen such an aversion on the part of a corporate citizen to do what is right for its neighbors and community."

For a long time the only evidence of the plant's impact on the nearby residents was anecdotal—mostly complaints of stinging eyes, asthma, and cancer. Like the residents of Sundial and Sylvester in West Virginia, the citizens of Alexandria were tired of sweeping black dust off their porches and windowsills. In 2001, in response to the concerns of community, the city starting monitoring the plant.

Del continued, “A test from the plant itself revealed, aside from the chemicals and pollutants released by the smokestacks, that twenty-nine tons of fly ash and ten tons of coal dust were escaping from the plant each year into the surrounding air and community.”

After Mirant’s test results were released, the city hired Dr. Jonathan Levy from the Harvard School of Public Health to conduct a study of the health impacts of the plant. Levy’s findings are notable. Particulate matter, which only accounts for a portion of the plant’s emissions, was causing 59 premature deaths, 66 hospitalizations, 870 emergency room visits, and 4,600 asthma attacks per year in the greater Washington, D.C. region. During the year in which Levy released his findings, Mirant exceeded its permit limitations for NO_x (nitrogen oxides that are created during combustion). Alone, these chemicals are not hazardous, but they combine with water in the air to create nitric acid, which results in acid rain and ozone in the lower atmosphere. Ozone is necessary in the upper atmosphere to shield the earth from the sun’s most intense radiation, but a high concentration in the air we breathe can destroy lung tissue, causing emphysema and bronchitis and aggravating heart disease. According to Del, after these initial findings in 2005, studies by the plant and the city indicated violations of National Ambient Air Quality Standards and Virginia Toxics Standards.

Of particular concern to Alexandria residents is downwash from the Potomac River facility to Marina Towers, a high-rise built nearly on level with the smokestacks. During certain weather patterns, the emissions from the stacks are blown into the side of the apartments instead of being dispersed into the air above. Consequently, the particulate matter, sulfur, and other toxic chemicals released by the station are inhaled by the residents of the Towers and the community under its shadow in greater concentrations than the output levels of the plant would usually indicate. Before the meeting, Misty Allen had asserted that Congressman Jim Moran (D-Virginia, and a former mayor of Alexandria), who had been vocal in his opposition to the plant, had a vendetta against the company only because one of his lady friends lived in the Marina Towers—a view of the plant was the backdrop for their rendezvous.

Del continued, her energetic delivery undiminished by the length of her speech: “It has been the persistence of the city, its residents, and its staff to bring all of us here today to push for strict operating controls, controls which should have been in place years ago. This should not have been left for the city to do ... The burden should always be on Mirant. It is a travesty instead that Mirant reminds us that the plant predates many of the residents in the neighborhood if this in any way justifies subjecting anyone to health risks. Mirant also justifies its approach by accusing the city of being cajoled by a vocal minority of residents.”

The next to speak was one of these vocal residents, the kind that both Alice Bertele and Ralph H. Hunt would deride. A man in his thirties or forties, David England made little attempt to veil the anger in his voice: "I speak on behalf of thousands of friends and neighbors who are tired of their eyes burning, their lungs feeling tight on what ought to be beautiful days jogging on the Mount Vernon River Trail, of spending time in beautiful, historic parts of Alexandria. We are tired of particulate matter having to be swept off of windowsills and off of our property. The Department of Environmental Quality has failed us on this. Their responsibility is to protect the environmental quality of our community, not to try to find every way possible for a plant to operate. Thus, we have turned to you, the Air Board. The message that I want to leave with you is that this is really a balancing act between public health and money. There are a number of steps that can be taken to protect the health and safety of Alexandria, but they cost money. I have here Mirant Corporation's 2006 report: \$918 million dollars. When they say that they can't afford to support the city's proposal, when they say they don't have the money to implement the kind of measures that will protect the health and safety of this city, it just ain't true."

His argument was answered by Bob Driscoll, the CEO of Mirant Mid-Atlantic Operations. Like the lawyers from D.C., he wore a black suit and spoke in an expressionless voice that evoked authority: "This is an issue of balancing the social value of reliable energy and Mirant's right to operate the plant. Mirant has demonstrated that operations and the investments we have made have complied with and supported the protection of human health in the greater Washington, D.C. area. The monitors have shown that the plant operates consistently well below any max limitations. Furthermore, this is not an issue of money. We have spent so far tens of millions of dollars on and are prepared to spend thirty million dollars more on our stack merger project."

The appeal to electric reliability is not new; it's consistent with the rhetoric of coal plants and the governmental agencies that have supported them since ambient air became a public health concern. In 1970, when the Clean Air Act was implemented, power plants complained that both these restrictions and the EPA threatened "the safe, reliable, and efficient operation of energy production across the country." Given the health hazards of coal burning plants, "safe" is probably a misnomer. Nor was "efficient" quite the stretch then that it is today. Currently, grandfathered coal plants are an ineffective way to burn coal; newer coal plants are 10 to 20 percent more efficient. Reliability is a coal plant's claim to fame: electricity delivered steadily by antiquated giants.

Driscoll continued with Mirant's most convincing argument: the Potomac River Generating Station is necessary for electrical reliability and redundancy in downtown Washington, D.C. After the Virginia DEQ

shut down the plant for emissions violations in 2005, the Department of Energy issued a rare emergency order to resume operations. Three of the five broilers revved up, spilling toxins into the nearby neighborhood. The DEQ order was about to expire in June, a month after the hearing. In order to ensure the future energy needs of the capital, Pepco was installing two transmission lines under the river from two of its other coal burning plants, a project which was slated for completion at the end of July 2008. This was why the argument between the City of Alexandria and Mirant involved a third player, the federal government.

Mirant proposed two solutions to mitigate its pollution problem. The first was the use of trona (trisodium hydrogencarbonate dihydrate), a mined mineral used to make baking soda that helps power plants collect particulate matter and unwanted gases. Mirant asserted that this would reduce its output of pollutants by 45 to 50 percent. To mediate the issue of downwash with Marina Towers, Mirant proposed the stack merger project heavily advertised by Bright Ideas Alexandria. Combining the output of the five stacks into two would theoretically create sufficient air pressure to force the emissions higher into sky, creating more “virtual” stack height.

Next to testify was Lara Greene, a toxicologist and chemist from the Massachusetts Institute of Technology (MIT). She was losing her voice and waved away offers of water, claiming it wouldn’t help. She began by stating that Mirant had given her and her colleagues a grant to study the problem. As a scientist employed by a power plant, she chose her words carefully in her testimony: “Anybody who lives in Marina Towers knows the stacks are far below the height they should be. When Marina Towers was built the idea of stack height didn’t exist yet. Since the 1980s, engineers have known that unless a stack is at a certain height, it is capable of creating a downwash situation for nearby residents in high towers. I would urge you all haste to increase the stack height, virtually in the stack merger, and I would also urge an actual stack height increase.”

This statement contained an admission that perhaps that stack merger would not solve all the downwash problems. A year prior to the hearing, Mirant had applied for and been granted permission by the Federal Aviation Administration to raise the stacks by fifty feet. Due to the expense of this project, Mirant decided to propose a stack merger instead.

Greene continued with another point of contention Alexandria had with Mirant, SO₂ emissions: “It is the case that the primary National Ambient Air Quality Standards for sulfur dioxide are not sufficient or protective under a very special set of circumstances which may or may not exist here. Although people without asthma—and many with asthma—can tolerate a reasonably high level of sulfur dioxide, there’s a subset of asthmatics who are very sensitive to SO₂. Now, this only happens upon hyperventilation, such as when somebody is exercising, but if you happen

to be a SO₂-sensitive asthmatic who is exercising in the presence of SO₂, within a few minutes, bronchial constriction takes place.”

When Greene mentioned this subset of asthmatics, I was reminded of my personal stake in the lawsuit. I live seven miles from the plant by car (and four as the crow flies) and belong to the region evaluated in Levy’s study. Asthma is a problem that I have dealt with since I was fourteen. Long-legged and tomboyish, I kept up with the fastest boys in grade and middle school. Ever since, running has been a challenge, and exercise is something I have to work into slowly. Maintaining my aerobic health is essential, a challenge when allergies increase my propensity for illness and aggravate my already serious case of asthma. Even in my early twenties, when I worked for the Forest Service and was strong enough to carry a ten foot fence post on my shoulder up a hill, I had to take breaks in long hikes to keep from passing out.

One of the pioneers in studying the health impact of power-plant emissions, C. Arden Pope, worked as an economics professor at Brigham Young University when my Grandpa Thomas was still one of its vice presidents. Between 1985 and 1988, the Geneva Steel plant—located near where I grew up in Orem, Utah—temporarily closed over a labor dispute. Pope took the opportunity to evaluate the claims of many mothers in the area that the plant was making their children sick. He studied hospital admissions during this period and found that admissions for pneumonia, pleurisy, bronchitis, and asthma were between 50 and 86 percent higher for children while the plant was operating, and during the worst weather conditions, they were up to 47 percent higher for adults. It has been documented since that children who live near power plants develop smaller and weaker lungs.

I don’t know if I belong to the group of SO₂-sensitive asthmatics or if my asthma is the result of my proximity to the Geneva Steel plant in my childhood, but I do know what it feels like to hyperventilate for hours and wake up the next day aching from the byproducts of anaerobic respiration in my muscles. I know what it’s like to be carried home from a basketball game because I can’t walk or to lose my vision temporarily because there is not enough oxygen in my blood to operate my brain. It’s a big deal for me, one that my doctor advised me could be deadly.

Next, Greene addressed Mirant’s plan to use trona to control particulate matter, which was first proposed in 2005 after the plant temporarily ceased operations. The plant’s original experiments with trona were kept secret from the public, which created suspicion among residents. Using trona was a new technique, and the plant had considered submitting their approach for patent. Earlier at the open house, Misty Allen had explained that trona was “just like baking soda” and “perfectly harmless.” This argument probably holds up if you were proposing to scrub your

toilet with trona, but the repeated inhalation of baking soda could be another matter.

Greene admitted, “Trona is not the best way to control SO_2 , but it is a feasible way to control SO_2 , and it seems like it will be feasible here. Now trona has a downside; a miner or miller who is working with trona can experience irritation ... In Alexandria, the amount of trona that would escape is such that at most the impact of half of a microgram.”

A report released by the EPA in 1977 under the Carter administration indicated that scrubbers were the best way to eliminate SO_2 from power plant emissions. EPA Deputy Administrator Barbara Blum claimed: “The only process with high sulfur-dioxide removal efficiency widely available now is scrubbers.” As of 2004, only two-thirds of America’s 420 plants had scrubbers installed, even though they have been shown to reduce the SO_2 emissions by 95 percent.

The last part of Greene’s testimony was the most passionately delivered, despite her raspy voice, indicating that there is an aspect of a scientist that no company can buy: “Of all the pollutants that we have to deal with in the East Coast, the one that matters the most is ozone. I am horrified that cars do not have mandatory mileage controls. I am disgusted that ozone has not become better controlled in our society, especially on the East Coast, and I’m frankly mystified that nobody seems to be focusing on ozone. Ozone is a problem for all of us whether we have asthma or not, whether we’re young or old. So when people have burning eyes and irritation from the short-term effect of ozone, and probably other oxidizing pollutants, I would urge you also to think about the oxidizing pollutants, not just focus on reducing SO_2 .” Greene didn’t connect this speech to the plant directly, but implicit in her testimony was the fact that larger pollution issues were at stake.

The D.C. contingent was up to bat next. Kevin Kolevar, director of the Office of Electricity Delivery and Reliability in the DOE, spoke first: “We are interested solely in having reliable energy to central D.C. protected. That is why the DEP [Department of Environmental Protection] issued an emergency order, one rarely used, in December 2005 that requires the operation of the Mirant power plant under certain limited conditions.”

The federal government sought a permit from the Air Pollution Control Board only until the completion of the two Pepco lines; they promised no further intervention afterward. The City of Alexandria was mistrustful, speculating that the federal government would reverse this promise once the energy demands of the District increased. For the previous two years, in order to comply with the Northern American Reliability Standards for electricity, the government had violated the Clean Air Act.

From Mirant’s perspective, the involvement of the federal government had bought them time. At this particular hearing, it was their trump

card to ensure the continuance of the plant after the Pepco lines were completed. Because Bob Driscoll and Kevin Kolevar had established the necessity of the plant, the plant employees took a more humble stance: an emotional appeal to the American values of the well-meaning workman. Mike Stumpf led off with a slightly different air than in his presentation at Mirant. His voice took on more of a Virginia regional twang: "I am one of the 122 people who work at the Potomac River plant: finely skilled electricians, chemists, instrument repairmen, mechanics, and operators that work in this area and want a clean environment, just like everybody else."

At this point a number of Alexandria residents yelled, "How many of ya live here?"

They were countered by a number of Mirant's employees on the opposite side of the room.

Mike continued: "We take our responsibility seriously because we know we can make a difference. I've worked at the plant since 1998 and can say with confidence that our environmental performance under various ownerships has improved in every area, with dramatic reductions in NO_x and SO₂. The site is cleaner than it ever has been before ... I hope you recognize that achieving this level of performance would not be possible without a workforce dedicated to continuous improvement. We are proud of what we do and have reached out to the community more than ever before ... Our goal remains to operate in a way that protects public health and the environment while simultaneously providing electric reliability to the region."

In fairness to Mike Stumpf, operating a plant built in 1949 according to any level of current pollution standards would be a formidable undertaking. The relevant question would probably not be whether the workers at Mirant are doing their best with what they have, but whether a coal burning plant built in 1949 should still be generating electricity.

A number of plant employees followed. Both Victoria Gross, a large African American woman, and her husband worked at the plant. She lived in Maryland, but previously her family had lived close to the plant for many years. All of them, she testified, were healthy: "What most concerns me is that our adversaries don't care about existing together as neighbors. They don't seem to care about working together to find solutions. To problems that would benefit all parties concerned, someone has to be the voice of reason. This should not be a dictatorship call. As surely as I stand before you today, a healthy, vibrant individual, I urge you to adopt a balanced operating regimen for this facility."

Lynwood Reed, my gentle dispositioned guide at the plant, spoke next. During his testimony, I realized the reason for his defensive reaction to my group's commentary on the beeps. "We not only have problems with the emissions of the stacks, but we get a lot of complaints from the city

about noise and particulate matter, and on every circumstance, we have responded, and we have mitigated those problems, and we will continue when problems come up to address them, and we have been addressing them. We are a company that's truly cares about our neighbors. After fifty-eight years as a servant of the Washington metropolitan area, we have offered reliable electric power using American's largest fossil fuel source, coal."

Dexter Hanford was the most animated and the most accusatory in his language, outdoing his colleagues in the image that Mirant was trying so hard to project: "I'm one of them employees from Mirant company. During the past couple years, I been the target of a lot of false accusations. Activists and other forces that wish to close the plant have labeled me a polluter—as one that makes the children sick. Obviously they don't know me. I have worked in operations for Pepco Mirant for eighteen years, and I am the father of two children, and I'm a h-a-a-a-rd worker."

"My job is to help provide reliable electricity to the power grid so that any of you can enjoy his or hers air conditioning during the summer or have heat in the winter. This is a job I take great pride in. I do this while operating with an overload of environmental guidelines consistently. One thing that I can't do is look anybody in this room—or anybody else for that matter—in the eye and say that not once have I been told by this company to violate any environmental guidelines. I also want to say, as an employee of eighteen years, I have had the opportunity to see the retirement of dozens of plant operators, all of which retired in excellent health after serving for more than thirty years. No one can say they've seen employees walking by with respirators; that is because we are very comfortable breathing the air in our environment. Act reasonable and allow me to continue to work to support my family."

Geneva Steel was one of the leading employers of the community I grew up in. I remember the fear that circulated in my neighborhood and church congregation when the company began to decline and lay off workers. Geneva Steel finally closed its operations in 2001, and the loss of this industry had an economic impact on the area for several years. Currently, this no longer affects the prosperity of the community, but Utah County's air quality still ranks among the worst in the nation. The steep mountain ranges that rise on all sides of Utah Valley trap pollution during summer and winter inversions, and on days when the air quality reaches red levels, all are advised to stay indoors. Mirant is quick to assert its right to operate, and although it owns the land that the plant occupies, Mirant does not own the Potomac River or the air. Water and air feed into global cycles and impact our collective health.

In May 2007, Virginia's Air Pollution Control Board ruled in favor of the city and issued a temporary operating permit based on the tighter

restrictions proposed by Alexandria. Mirant sued and lobbied the state government to remove the power of the Air Pollution Control Board and the Water Control Board to issue permits. The Potomac River plant operated while Pepco finished its lines and continued to operate, no longer necessary to the electrical reliability and redundancy of the D.C. area, but in keeping with its right to do business. Alexandria persisted in its suit, and in 2008, the city reached an agreement with Mirant, locking in more stringent emissions standards and requiring the installation of baghouse filters to reduce particulate matter. In order to make these changes at the plant, Mirant pledged \$34 million. This was a temporary victory for the city, but it hasn't lost sight of its ultimate objective. This is where the workers' testimonies had Alexandria pegged. Local residents will not be satisfied until the Potomac River Generating Station closes operations permanently.

In a situation where there are so many disparate concerns, perhaps the only democratic solution is the numbers game. We could tally up the number of exercising asthmatics in Alexandria and compare that with the number of employees at Mirant. We could count the number of residents in Alexandria intent on closing the plant and compare that with the number of people in Maryland who use the electricity Mirant produces. We could also compare this amount with the number of Appalachian folk employed, displaced, or poisoned by the mine from which the coal used by Mirant is dug, and then we would have to combine this figure with the number of Appalachians impacted by the coal processing plant.

There are some who still assert that Mirant may be necessary for the electrical reliability and redundancy of D.C. as demands for electricity increase. We could compare the effects of D.C. going black for a day—the local effects on the hospitals and the local and global effects on the economy—but then, of course, we would have to factor this against the worldwide impacts of the CO₂ released into the atmosphere.

In the public hearing on the Potomac River Generating Station, there wasn't much talk of alternative energy. It wasn't the immediate issue at hand, but for some residents of Alexandria the coal burning dilemma may be as simple as burning it somewhere else. "Somewhere else" would inevitably fall on our less prosperous neighbors, who already suffer the human costs of digging and cleaning coal, and their rates of lung cancer would be elevated accordingly. "Burning it somewhere else" is a solution that's merely hiding the problem, ignoring the coal in our veins: a refusal to pay the actual price of our lifestyle.

Mirant can be a little defensive. But in a way, one can hardly blame them. Energy can't be stored except in batteries, and it is generated on an at-need basis. The truth of the grid is that demand directly impacts supply. There is no middleman between our energy use and the power plant;

the grid is only a highway. The moment we turn on a light, we tap into power from the grid. More energy is generated to keep the grid at equilibrium, more coal is burned, more coal is dug. In the last ten years, energy demands have gone up by 40 percent. The average American uses twenty pounds of coal a day. *Down there where the coal is dug it is sort of world apart which one can quite easily go through life without ever hearing about ... Practically everything we do, from eating an ice to crossing the Atlantic, and from baking a loaf to writing a novel, involves the use of coal, directly or indirectly ... We are capable of forgetting it as we forget the blood in our veins.*

Or in the words of contemporary journalist S. C. Gwynne: “When you turn on your television set, air conditioner, or dishwasher, you are doing something that is at once mechanical and moral. In order to power your appliances, you must summon electricity from a vast sea of energy ... Generating plants across the [nation] powered variously by coal, gas, nuclear fission, wind, and water dump electrical current into this grid, and by flipping a switch you engage them all. No matter what your politics are, how much of an environmentalist or conservationist you might be, or whether you actually give a damn where your electricity comes from, you’re complicit.”

