

lights to go on when we flip a switch, and we do not expect our computers to shut down as nature dictates.

Solar and wind electricity are available only part of the time that consumers demand power. Solar cells produce no electric power at night, and clouds greatly reduce their output. The wind doesn't blow at a constant rate, and sometimes it does not blow at all.

If large-scale electric energy storage were viable, solar and wind intermittency would be less of a problem. However, large-scale electric energy storage is possible only in the few locations where there are hydroelectric dams. But when we use hydroelectric dams for electric energy storage, we reduce their electric power output, which would otherwise have been used by consumers. In other words, we suffer a loss to gain power on demand from wind and solar.

At locations without such hydroelectric dams, which is most places, solar and wind electricity systems must be backed up 100 percent by other forms of generation to ensure against blackouts. In today's world, that backup power can only come from fossil fuels.

Because of this need for full fossil fuel backup, the public will pay a large premium for solar and wind—paying once for the solar and wind system (made financially feasible through substantial subsidies) and again for the fossil fuel system, which must be kept running at a low level at all times to be able to quickly ramp up in cases of sudden declines in sunshine and wind. Thus, the total cost of such a system includes the cost of the solar and wind machines, their subsidies, and the cost of the full backup power system running in “spinning reserve.”

Finally, since solar and wind conditions are most favorable in the Southwest and the center of the country, costly transmission lines will be needed to move that lower-cost solar and wind energy to population centers on the coasts. There must be considerable redundancy in those new transmission lines to guard against damage due to natural disasters and terrorism, leading to considerable additional costs.

The climate change benefits that accrue from solar and wind power with 100 percent fossil fuel backup are associated with the fossil fuels not used at the standby power plants. Because solar and wind have the capacity to deliver only 30 to 40 percent of their full power ratings in even the best locations, they provide a carbon dioxide reduction of less than 30 to 40 percent, considering the fossil fuels needed for the “spinning reserve.” That's far less than the 100 percent that many people believe, and it all comes with a high cost premium.

The United States will need an array of electric power production options to meet its needs in the years ahead. Solar and wind will have their places, as will other renewables. Realistically, however, solar and wind will probably only provide a modest percentage of future U.S. power. Some serious realism in energy planning is needed, preferably from analysts who are not backing one horse or another.

[From the Daily Times]

ALCOA HOPES NEW POWER CONTRACT WILL
BRING SMELTING RESTART

(By Robert Norris)

Ninety-five years after ALCOA Tennessee Operations fired up its first potline and seven weeks after the company shut down its last, the question remains: Will aluminum ingots ever roll out of the South Plant again?

“For some, the question is not so relevant anymore. After the announcement that the

plant was being closed, more than 130 ALCOA employees accepted the company's severance package. Others were laid off—245 hourly workers and 80 of the salaried workforce.

The London Metal Exchange price for aluminum is half what it was one year ago, so prospects for any immediate change is nil. The demand for the 1.3 million pounds of molten metal that the smelting plant can produce does not exist in the current marketplace.

Still, leadership at the company is hopeful that when the economy rebounds, Tennessee Smelting Operations will be in a position to be restarted.

“We're in the standard, ready position,” said Brett McBrayer Tennessee Primary Metals location manager. “The employees have done such an incredible job of preparing the plant to have it in as much a ready state as possible.”

Cranes are being moved up and down to keep them operational, and preventive maintenance is being done so the plant will be prepared if and when the call comes to restart.

“I can't say enough about the employees. The way they faced the tough call and the way they responded says a lot about the character of the employees in this region. That drives me even harder in discussions with TVA to get a deal done,” McBrayer said.

The deal McBrayer is looking for is a long-range power contract with the Tennessee Valley Authority—the current contract expires next year—that will allow Tennessee Smelting Operations to be cost competitive when metal prices rebound. That has happened at ALCOA smelting plants in other regions where the company has negotiated more flexible prices with electricity suppliers.

“We've been in discussions with TVA for quite some time. It always seems more complicated than it needs to be, but there are a lot of issues,” McBrayer said. “The sooner we get a deal done, the stronger candidate we'll be for a restart. The longer negotiations drag out, it seems to become harder. An agreement can't happen soon enough.”

TVA issued a statement indicating its desire to reach an equitable agreement with the aluminum company.

“ALCOA has long been a valued customer of TVA's and we are working diligently to reach agreement on a long-term power contract for the future. While these contract negotiations are confidential, we are working to reach an agreement that will allow ALCOA to operate its Tennessee facility while, at the same time, not disadvantaging other Valley ratepayers,” said Jim Allen, a TVA spokesman.

Brickey Beasley, president of United Steelworkers Local 309, said he looks forward to the day the South Plant Smelting Operations reopens and also in maintaining the North Plant rolling mill. The Tapoco Division of ALCOA—the four-dam hydroelectric project on the Little Tennessee and Cheoah rivers—should give Tennessee Operations an edge over other locations, according to Beasley.

We hope that TVA can help out some and the economy can help some,” Beasley said, “We've got a great workforce that's idle right now.”

McBrayer, who is chairman of the Tennessee chamber of Commerce and Industry Board of Directors, said the impact of the shutdown goes beyond the employees immediately affected.

“Being from Blount county and this are a—recognizing the impact on East Tennessee—there's more than just the families impacted from the layoff. The impact multiplies exponentially,” Beasley said.

“Hopefully, when we obtain the power contract, it will just be a matter of waiting for the market to pick up again. The good thing about aluminum is that it is used in more and more applications. It's going to be around for a long time.”

GUANTANAMO BAY

Mr. JOHANNS. Mr. President, I rise to speak about the detainment facilities at Guantanamo Bay Naval Base.

At the end of January of this year, the President signed an Executive order indicating his intention to close Guantanamo. Unfortunately, the Executive order was very short on detail. We do know the Justice Department is reviewing the cases of individual detainees. We know the President would like to move these detainees somewhere else. Unfortunately, 3 months after the release of the Executive order, that is about what we know today.

If the President still plans to close Guantanamo Bay within a year, the clock is ticking, and we only have 9 months until the deadline laid out in the Executive order. Indeed, the President's supplemental request for Iraq and Afghanistan includes \$80 million to close Guantanamo. We know that \$30 million would go to the Justice Department to shut down the facilities, review detainee procedures, and to fund future litigation. The other \$50 million would go to the Department of Defense, primarily to support the transfer of the detainees and the associated personnel. However, we do not know—and neither does anyone else within the administration or outside it—where the detainees would go. I am troubled by this in-substantial approach and what appears to be a haphazard approach. This is a matter vital for national security.

Memories have dimmed and we forget the days surrounding September 11. We remember the day itself quite well—the shock in the morning—but we seem to forget the resolve that came after that. The resolve was born of our understanding that there was a global network of violent extremists with substantial international support dedicated to attacking the United States and its allies. Make no mistake about it, these terrorists are highly dangerous. By now, most Americans are probably familiar with the name Khalid Shaikh Mohammed. He is a Guantanamo resident. Before his capture in 2003 and later transfer to Guantanamo, he was one of al-Qaida's top agents and mastermind behind the September 11 attacks. I believe this man belongs in Guantanamo. With his contacts and his terrorist expertise, he would be a menace to the United States and its allies should he ever be set free.

But he is only the operational face of this contagion. Also in custody at Guantanamo is Ramzi Bin al-Shibh, a lead operative in the September 11 plot. This terrorist could not obtain a U.S. visa to get into this country. That

made it impossible for him to participate in the attacks directly. He was forced to remain in Germany where he lived as a student. However, this did not stop him from acting as a primary communications liaison between the U.S.-based hijackers and the al-Qaida management in Afghanistan and in Pakistan.

Shortly after the September 11 attacks, he arrived in Afghanistan where he was forced to flee when the Taliban fell. He was apprehended in 2002 and eventually transferred to Guantanamo.

Terrorism runs in this family. His uncle is Khalid Shaikh Mohammad, mastermind of the 9/11 attacks. His cousin is presently incarcerated for his participation in the 1993 World Trade Center bombing event. He served as a travel and financial facilitator for the 9/11 terrorists and helped al-Qaida members escape from Afghanistan after the fall of the Taliban. From 2002 to 2003, this individual prepared al-Qaida members for travel to the United States and later plotted attacks against Western targets in Karachi.

A different detainee at Guantanamo was involved in plotting to kill the Philippine Ambassador to Indonesia, as well as attacks on a series of Indonesian churches on Christmas Eve in the year 2000. Most famously, this terrorist helped plan the Bali bombings, in October of 2002, which killed over 200 people, including several Americans.

Another notorious face residing at Guantanamo was the head of al-Qaida operations in the Arabian Peninsula. This terrorist saw combat within various insurgencies and later with the Taliban before being instructed by Osama bin Laden to focus on terrorism in Yemen. He followed bin Laden's orders. In 2000, he successfully coordinated the attack of the USS Cole in the Yemeni Port of Aden. That attack killed 17 American sailors.

The Cole attack is the most well-known event in this individual's long career of terrorism, but it doesn't stop there. He has a resume of attacks. He coordinated efforts to kill U.S. personnel in Saudi Arabia. He planned car bomb attacks and assaults on oil tankers. He was also involved with a plot to crash a plane into a Western naval vessel in the UAE.

In 2002, however, he was captured and ultimately sent to Gitmo.

These extremists are part of the al-Qaida A-Team of terrorists; and they have no business being released or transported to American soil.

I describe these individuals today to put a face on this debate.

The al-Qaida members detained in Guantanamo are the worst of the worst. They are unrepentant, they are unpredictable, and are still dangerous.

So, if not Guantanamo, where should these unrepentant terrorists reside?

One option would be for our international allies to help with their detainment.

I know that the administration has been trying to persuade the Europeans

to accept custody of some of the detainees. Attorney General Holder is in fact discussing this issue with European officials this week.

On Wednesday, he will be making a speech in Berlin about Guantanamo, and I hope he has some good news. Unfortunately, there has not been much to date.

When the President met with European leaders in early April, he also asked for help in resettling the detainee. They agreed to help—with one.

We should perhaps count that as a victory, since many national leaders have said thanks but no thanks or remained completely noncommittal.

For example, Austria's interior minister has rejected accepting detainees flat-out. I am not surprised. Despite all the international angst about Guantanamo, most nations recognize that these detainees are very dangerous to free people.

Our time is not unlimited, since the administration's self-imposed January 2010 deadline for transferring these individuals is coming closer. In the absence of radically increased international cooperation, the administration will thus be forced to release the remaining detainees or keep them on U.S. soil.

And those are possibilities that I, like many Nebraskans, am particularly concerned about. Two of the sites being considered are Fort Leavenworth in Kansas, and the United States Penitentiary Maximum Security facility in Colorado, known as ADX Florence. Both are far too close to Nebraska for comfort—both within 250 miles of my home State of Nebraska.

This is likely a non-starter with my constituents, and for good reason. Thus, last week, I sent a letter to Attorney General Holder asking to be informed if any of the detainees were to be moved within 400 miles of Nebraska.

I will not allow my home State to be endangered by the proximity of unrepentant al-Qaida terrorists. Other Senators and their constituents are likely to have similar concerns.

In 2007, the Senate rejected moving Gitmo detainees to U.S. soil. The Senate spoke loudly and clearly in an overwhelming 94-3 vote against moving Gitmo prisoners to our shores or releasing them into our society. I do not believe the sentiment in this body has changed today.

The last option that I will mention—releasing them into the American population—seems unthinkable, if not absurd. However, if they are transferred into the American judicial system, their release is a possibility. This option is simply unacceptable.

The \$80 million requested by the administration to close Guantanamo, and the executive order signed to that effect, are troubling.

In a dangerous world, facilities such as those at Guantanamo are a necessity that we cannot change simply by waiving a magic wand and wishing it so.

With about 270 days left before its proposed closure date, it is clear the administration still has no plan for its demise.

That is a gamble that the American people cannot afford.

Mr. President, I yield the floor and suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Mr. SANDERS. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

CREDIT CARD INTEREST RATES

Mr. SANDERS. Mr. President, I wish to take just a very few moments to speak about an issue I think is resonating and causing great concern all over our country; that is, the outrageous escalation in credit card interest rates.

I note that the House and the Senate will soon be addressing the issue of credit cards, but I hope very much that both bodies will include within their legislation something that is long overdue; that is, a cap on interest rates. We need a national usury rate law. It is totally unacceptable to me—and I think the vast majority of the people in our country—that credit card companies are charging people 25, 30, and 35 percent rates of interest on their credit cards. This is usury. This is wrong. From a biblical perspective, this is immoral, and it is time we got a handle on it.

The truth is that a number of years ago, many States had usury laws which prohibited very high interest rates. As a result of a Supreme Court decision, those State laws were essentially made null and void and companies that moved to States such as South Dakota and Delaware could essentially charge the American people any rate they wanted. Within the last 20 years, we have seen a huge increase in interest rates. About one-third of the American people are paying 20 percent or more. It is time we got a handle on that issue.

What I would like to do this afternoon, very briefly, is read some of the e-mails that are coming to my office from the State of Vermont but, in fact, from all over this country. On late Friday afternoon, I sent out an e-mail to our e-mail list, and within 2 days' time we have had 900 responses from people who have expressed to me what is going on in terms of their relationship with their credit card companies. The stories I am hearing are absolutely appalling—in some cases, unbelievable. What is particularly disturbing is that at a time when the taxpayers of this country have provided hundreds of billions of dollars to bail out failing financial institutions—which, because of their greed, their recklessness, and their illegal behavior, caused them to collapse—these same financial institutions are now saying to the taxpayers