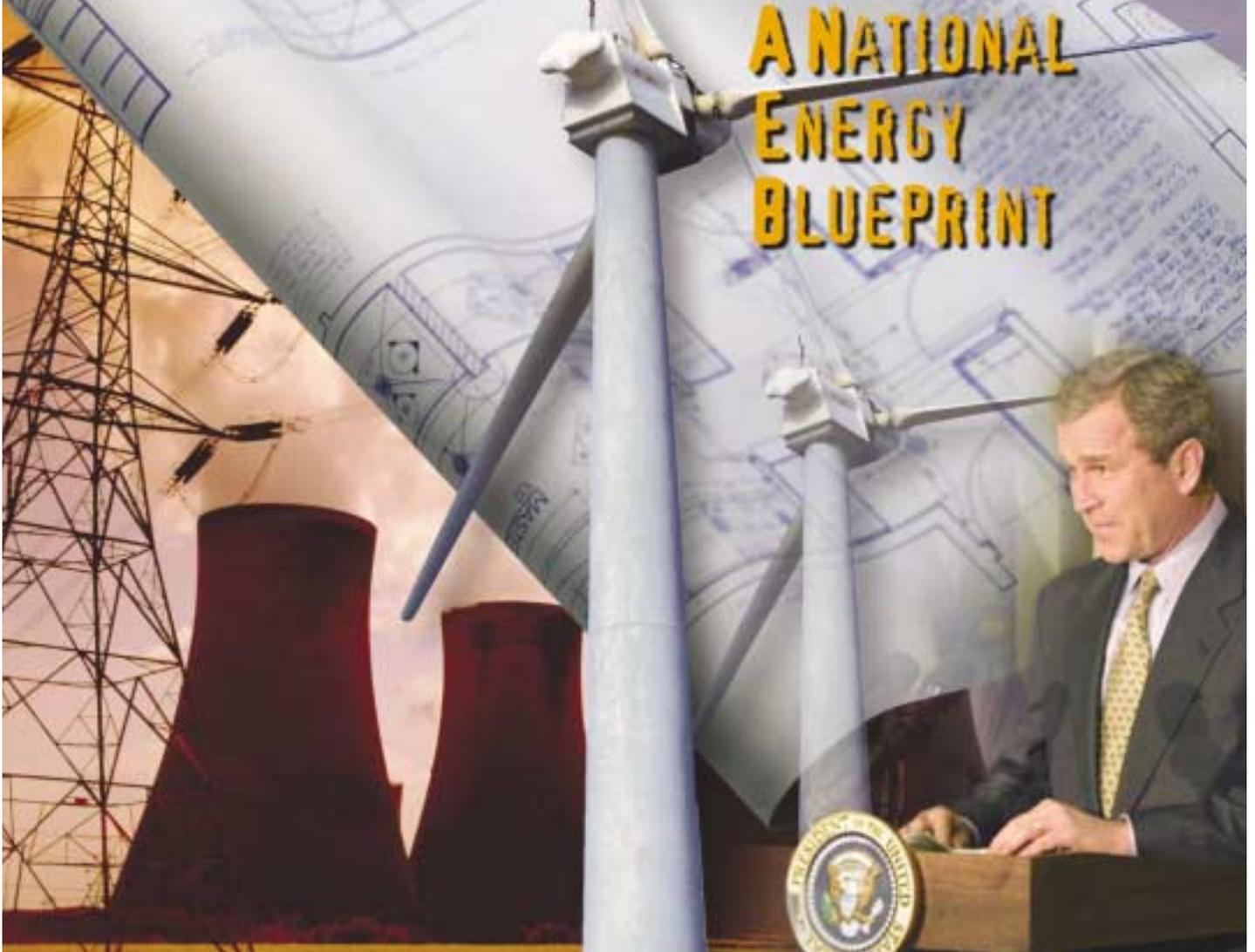


JULY 2001 VOL. 36 NO. 7

# Penn *Lines*

Your Cooperative Newsmagazine

ROLLING OUT  
A NATIONAL  
ENERGY  
BLUEPRINT



# PennLines

Vol. 36 • No. 7

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**ABOUT THE COVER:** President Bush's sweeping national energy strategy relies heavily on long-term solutions, such as increased domestic production of fossil fuels, broader use of nuclear power, expanded transmission line development as well as conservation. Graphic by Tricia Dickson, PREA.



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COMMENTARY

## Energy Crisis Talk Triggers Bad '70s Flashbacks



by Perry Stambaugh  
Editor

For those, like me, who did the better part of our growing up in the 1970s, the Arab oil embargo, gas lines, speed limits set at a miserly 55 miles per hour and fuel price-inspired heating cutbacks — and the economic downturn associated with them — defined our rites of passage. Here in the Northeast — which suffered the most during that decade — many of us are still haunted by those events.

In my own case, energy conservation remains a big factor in purchasing decisions. Over the past several years, I have replaced nearly every major appliance in my house with more efficient models. I continue to set the thermostat at 65 degrees — much to the chagrin of my family — and have installed new replacement windows and a new heating system, all in an effort to shave the amount of electricity and heating oil needed.

Since I live in a rural area and face a 90-minute round-trip commute to work everyday, gas prices are a big concern. As a result, I pedal around in an all-wheel-drive Subaru (manual transmission, for better mileage) not a gas-guzzling SUV or pickup (I save them for the short-haul work they were designed for).

Apparently, I'm not alone in taking these actions. Nationwide, average annual energy use per person today (at 354 million Btu) is nearly identical to what it was in 1973 — even with computers, SUVs and fivefold economic growth thrown in the mix. That's quite a testament to the power of conservation and energy/fuel efficiency!

Of course, a lot went into making this happen — appliance makers realizing that energy efficiency was an effective marketing ploy, industries harnessing waste steam from their manufacturing processes as an energy source, cars being forced to get

better gas mileage. But natural population growth, along with the collapse of oil prices from 1986-99 (which contributed to the current SUV-buying craze) and explosion of digital appliances, has led to a 30 percent boost in overall energy demand — more than half of it in just the past six years.

And demand for energy of all types shows no sign of slowing down. By 2020, the U.S. will have 20 percent more people (up to 337 million, according to the Census Bureau) and with it, 20 percent more of everything that consumes energy. Given the penetration of digital technologies and lax fuel efficiency standards for light trucks, it's a given that people will eventually begin using more energy per capita.

Obviously, our nation faces a grim energy future unless supply and demand are brought into balance. If nothing is done, the U.S. Energy Information Administration predicts that the U.S. will rely on foreign sources for 64 percent of our oil two decades from now, compared to 56 percent today. Natural gas use will rise by two-thirds. Meeting a 30 percent expected increase in electricity demand will require the construction of between 1,300 and 1,900 new power plants (or 393,000 megawatts) — an average of roughly one new plant coming on-line every week.

While environmentalists contend conservation measures coupled with Btu and carbon taxes can shrink demand enough to prevent energy shortages down the road, history shows that these steps, by themselves, will never work. The reason — Americans believe they have a right to cheap energy.

Just like we discovered in the 1970s, big government alone cannot force people to use less energy or use it more efficiently — they have to do so voluntarily. While a little bit of government pressure is necessary at times (for example, fuel efficiency requirements for cars, at 27.5 miles per gallon, have not increased since 1985, a real travesty), change ultimately has to be driven by free-market forces.

I think President Bush, strategically at least, hit the nail on the head by emphasizing increased electricity and fossil fuel

production (boosting supply to meet demand), coupled with conservation and regulatory reform components, in his national energy policy. Opening the Arctic National Wildlife Refuge to oil and natural gas exploration, for example, is a savvy (though apparently politically doomed) idea if for no other reason than the threat of doing so pressures OPEC to lower crude oil prices or risk losing market share. Lower oil prices, of course, are a boon to the rural economy, which — absent few public transportation options — is extremely sensitive to the cost of motor fuels.

There is some question whether parts of the White House's energy agenda require a government solution, though. Already, the market — thanks to high energy prices — is hard at work solving many supply concerns.

Oil companies, for one, plan to invest about \$41 billion this year to increase output, with 955 new rigs now in operation — an all-time high. On top of that, 633 power plants, representing 323,410 megawatts of electric generating capacity — almost the entire amount projected as necessary by 2020 — are expected to enter service by 2008, with 312,000 megawatts slated to hit the grid between now and 2004.

However, there is certainly a squeeze on electric transmission capacity and little investment in that area — just 8,445 miles of new high-voltage lines are planned through 2009. In ranking energy priorities, most experts believe that establishing the electric transmission equivalent of an interstate highway system, governed by strong federal standards, should top the list.

Pennsylvania's electric cooperatives have taken a leading role on energy issues and actually drafted the official resolution that is guiding cooperative lobbying efforts, nationally, on the subject. In short, the statement calls for Congress and the Bush Administration to promote diversity in electric generation (a balance of coal, nuclear, natural gas, wind and other renewable fuels), take into account both production and environmental objectives and provide financing for research into new energy technologies (such as clean coal initiatives) that benefit rural residents.

As a child of the '70s, I see addressing our nation's energy challenges as "job one." After all, I remember sitting in gas lines, driving 55 and shivering in the dark once before. I don't want to do so again. 💡

# A BLUEPRINT TO FIX U.S. ENERGY WOES

The White House rolls out proposals to tackle a looming national energy crisis

by Perry Stambaugh

Editor

Using Touchstone Energy® Place in St. Paul, Minn., and later the 12-unit Safe Harbor hydro plant in Lancaster County, Pa., as backdrops, President Bush in mid-May announced a sweeping national energy strategy — the first serious federal energy measure floated since the Energy Policy Act of 1992. The 163-page action plan — drafted by the Bush Administration's National Energy Policy Development Group, a task force headed by Vice President Dick Cheney — relies heavily on long-term solutions, such as increased domestic production of fossil fuels, broader use of nuclear power, expanded transmission line development as well as conservation.

"America faces its most serious energy shortage since the oil embargoes of the 1970s," the President declared. "The problem is deep and wide — a fundamental imbalance between supply and demand — which requires politically risky steps to increase energy supplies."

He added, "If we fail to act, America could face a darker future, which is being previewed with rolling blackouts in California and rising prices at the gas pump."

Democrats quickly assailed many of the proposals as catering to big oil, mining and power interests — groups that dumped \$22.5 million into Republican coffers during the last election. Conservatives blasted the plan as well, contending that it relies too heavily on "big government" instead of market forces.

Of the 105 recommendations made by the National Energy Policy Development Group, 85 are directives to federal agencies and 20 are requests for congressional action. Among the highlights:

## Conservation

In discussing details of the energy strategy following its release, Cheney

remarked, "We need to make up for lost time — the Clinton Administration ducked energy issues for eight years." But he conceded that gasoline prices nearing \$3 per gallon in some cities and electricity problems in California turned energy conservation into a key element.

"In fact, we have directed most new financial incentives [\$6.3 billion] toward energy conservation efforts and alternative fuel development, not increasing oil and gas production," Cheney acknowledged. "Energy production and environmental protection are not competing purposes."

Conservation ideas include:

- Giving consumers who purchase vehicles powered by hybrid electric/gas or fuel cell engines a \$2,000 tax credit, with total funding of \$4 billion over 10 years. Ironically, this was a suggestion made by former Vice President Al Gore during the 2000 presidential campaign — one that was soundly ridiculed by then-candidate Bush.
- Creating a 15 percent tax credit for home solar energy systems.
- Extending a 1.7 cents per kilowatt-hour "environmentally friendly electricity" tax credit, due to expire in 2002, for power produced from wind, biomass (such as crop residue) and poultry manure.
- Encouraging industries to switch to cogeneration systems (termed "combined heat and power projects") and promote them through more flexible environmental permitting, investment tax credits or shortening their depreciation life. Cogeneration accounts for 9 percent of U.S. electricity production, compared to 59 percent in Denmark and 42 percent in the Netherlands.
- Expanding the federal Energy Star



program (which promotes super energy-efficient office buildings) to schools, stores, health care facilities and homes, and adding Energy Star labeling to more energy-efficient appliances and other products.

- Increasing public education programs relating to energy efficiency and raising public awareness of how much homeowners can save through conservation.

However, Cheney warned that "reality" must be factored into the conservation equation, especially since soaring energy costs have sapped \$200 million out of the economy over the past two years.

"To speak exclusively of conservation is to duck the tough issues ... we can't say 'Gee, we'll just conserve our way out, we don't have to produce any more,' or 'Wind, solar and other renewable technologies will take care of it, so we don't need fossil fuels anymore,'" he chided. "Renewables may prove to be more plentiful and cost-effective in the future, but we are not yet ready to stake our economy and our way of life on that possibility. They only supply 2 percent of our nation's electricity needs and by themselves cannot solve our problem of demand exceeding supply."

Cheney continued, "You can't simply conserve your way out of an energy problem. California, which has an aggressive

conservation effort, is a prime example of that. Conservation may be a sign of personal virtue but it is not a sufficient basis — all by itself — for sound energy policy.”

In response, green groups argued that the Bush Administration was simply using scare tactics to make the case for more energy exploration rather than emphasizing conservation which could rapidly cut U.S. energy consumption within a few months.

“We don’t have an energy crisis, but a lack of misplaced priorities and political will to do what is in the best interests of the country,” alleged Alden Meyer, spokesman for the Union of Concerned Scientists, noting that the White House’s proposed 2002 budget slashes spending on renewable energy and efficiency research programs by more than \$200 million.

### Finding More Oil

The Interior Department will be asked to consider opening up some federal lands, including protected coastal plain areas of the Arctic National Wildlife Refuge (ANWR), to “environmentally responsible” oil and natural gas drilling. To lease land in ANWR alone, energy companies would need to pay \$1.2 billion for exploration rights, with the fees designated to fund alternative energy research. Drilling supporters claim petroleum reserves in ANWR, at 16 billion barrels, would add about 600,000 barrels of oil per day to U.S. supplies over four years — enough to replace current crude imports from Iraq.

“Only about 2,000 acres of the 19 million acre wilderness region would be impacted by oil exploration,” Cheney said. “The notion that developing ANWR requires a vast despoiling of the environment is false. This is one reason why the vast majority of people who live in Alaska support developing this resource.”

Also up for possible drilling is Alaska’s National Petroleum Reserve, a vast 23 million acre site created in 1923 to provide emergency oil supplies for the U.S. Navy.

### Easing Gas Crunches

To deal with regional gasoline shortages, the U.S. Environmental Protection Agency (EPA) will look into limiting the

smorgasbord of cleaner-burning “boutique” gasoline blends required in different municipalities, and may perhaps suggest a switch to a single fuel for the entire country. The move would ease constraints on U.S. refinery capacity — no major refineries have been built since 1976 and the number operating has shrunk from 315 to 152 over that span.

“We can’t blame higher gasoline prices on OPEC — production levels and oil prices have been fairly stable this spring,” Cheney explained. “The biggest problem comes back to supply — the fact that we haven’t built a new refinery in this country for a quarter-century — and to some extent on clean air requirements imposed on those refineries that are still operating. Refining is a lousy business, with a rate of return averaging 5 percent or less per year.”

To ensure that gasoline flows freely in the future, the task force suggests building at least 1,300 more oil refineries and modernizing fuel delivery systems.

### No Energy Independence Without Coal

The task force stressed that coal accounts for 51 percent of U.S. electric generation and 94 percent of national energy reserves, with a 250-year supply at present extraction rates. On an energy-equivalent basis, domestic coal reserves actually exceed worldwide reserves of petroleum.

“Coal will remain the cheapest method of producing electricity for many years to come, but it is certainly not the cleanest fuel,” Cheney observed, adding that 95,000 megawatts of coal-fired generating capacity is more than 30 years old and operating less efficiently (dirtier) than new plants. “Because of this, we must place an emphasis on developing clean coal technologies [which could be used to repower older generating stations].”

As a result, the energy plan includes a Bush campaign commitment to spend \$2 billion on clean coal research over 10 years. Because of the importance of coal to the nation’s rural economy, electric cooperatives are working with Congress to promote clean coal initiatives and to make sure that coal-fired generation remains part of a balanced energy framework.

### Regulatory Certainty

Utilities and oil companies have long held that stringent federal air pollution controls — called “new source review” — discourage them from boosting electricity and gasoline output at existing facilities. As interpreted by the Clinton Administration, new source review — part of the Clean Air Act of 1990 — requires that state-of-the-art pollution controls be installed at refineries and coal-fired power plants when equipment is upgraded.

To address the issue, EPA is asked to conduct a 90-day study on whether to roll back the rules while the Attorney General is directed to review an EPA lawsuit against midwestern and southern coal-burning utilities that have violated them. (The U.S. Supreme Court earlier this year upheld EPA’s power to enforce the regulations.)

Along the same lines, EPA is asked to work with Congress on drafting legislation that establishes a flexible, market-based program to cap and reduce emissions of acid rain-causing sulfur dioxide, smog-producing nitrogen oxide and mercury, a toxic heavy metal, from coal-fired power plants and industrial boilers. The multi-pollutant concept would phase in reductions over a reasonable period of time and offer incentives (such as emissions-trading credits) to help companies meet targets.

By creating one federal standard (rather than a patchwork of sometimes conflicting state and federal regulations)

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# ENERGY BLUEPRINT

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emissions, the task force feels utilities will be better able to decide whether to upgrade existing coal plants, convert them to cleaner fuels like natural gas, or shut them down entirely.

## Greenhouse Gases

On the thorny subject of global climate change, the energy plan "recognizes the seriousness of the issue" and calls for additional study into technologies that will reduce or sequester emissions of carbon dioxide and other greenhouse gases blamed for causing global warming.

Echoing President Bush's decision earlier this year not to cap or regulate carbon dioxide emissions from coal-fired power plants, the task force notes that U.S. carbon dioxide emissions levels during the 1990s only increased 1.5 percent per year, even as the Gross Domestic Product (GDP) jumped 4 percent annually. Historically, carbon dioxide emissions levels have climbed at half the rate as the GDP.

In discussions with Congress, electric cooperatives are underscoring the negative consequences of carbon dioxide emissions regulations on the rural economy.

## Easing Transmission Bottlenecks

To begin the process of forming a truly national electric grid, the task force wants Congress to give the Federal Energy Regulatory Commission (FERC) ability to obtain rights-of-way for new electric transmission lines and to overrule state and local regulatory bodies in disputes over where lines should go. Congress has avoided granting FERC eminent domain powers over electric facilities in the past, since it tramples on both private property and states' rights.

"The transmission system is the highway for interstate commerce in electricity," the report states, "but regional shortages of generating capacity and transmission constraints reduce the overall reliability of electric supply in the country and are reducing the quality of power delivered to end users. To expand transmission facilities, the current siting process — which gives siting authority to states and stands in stark contrast to

other interstate facilities like natural gas and oil pipelines, railroads and highways — must be changed to reflect the interstate nature of the system."

Electric cooperatives oppose a national grid unless consumers have a say in how it is built and who controls it.

In addition, the task force recommends federal legislation that gives the North American Electric Reliability Organization (NAERO) power to enforce reliability rules for all users of the bulk power grid. NAERO is a non-profit group that coordinates electric reliability across the U.S., Canada and the Mexican state of Baja California Norte.

## Nuclear Renaissance?

More than 20 percent of the nation's electricity needs are currently being met by 103 commercial nuclear plants, the task force noted. In Pennsylvania, nuclear plants supply 37.9 percent of the state's power. Last year, 66 percent of the power used by electric cooperative consumers in Pennsylvania and New Jersey came from their 10 percent ownership of the Susquehanna Steam Electric Station, a 2,200-megawatt nuclear power facility located near Berwick, Pa.

"To ensure sufficient and reliable supplies of electricity into the future, nuclear power must not be overlooked," Cheney said. "Not a single permit for a new nuclear plant has been granted since 1973. But nuclear power is safe, the technology gets better all the time and it has the great advantage of not emitting carbon dioxide and other greenhouse gases, just water vapor."

Nuclear suggestions in the energy plan include:

- Streamlining the process for utilities to build new nuclear power plants.
- Providing assurances that licenses for existing reactors will be renewed.
- Renewing the expiring Price-Anderson Law, which provides electric utilities with liability coverage for nuclear power activities.
- Speeding up construction of a central, high-level radioactive waste repository. Although not mentioned by name, the likely location for such a facility is deep inside Nevada's Yucca Mountain — the desert site designated by Congress in 1987 to permanently house spent fuel

rods produced by commercial nuclear power plants. Legislation to accelerate the nuclear waste storage program over the past five years was repeatedly stymied by President Clinton's veto pen.

"We've got waste piling up at reactors all over the country," Cheney mentioned. "There needs to be a permanent repository if nuclear power is to be viable. The French do this very successfully and very safely in an environmentally sane manner. We can do the same thing."

## Vehicle Fuel Efficiency

With worries that Americans are using too much gasoline on everyone's radar screen, Transportation Secretary Norman Mineta is directed to recommend whether or not to boost miles-per-gallon standards for cars and light trucks, using results from a National Academy of Sciences study to be released in July.

Energy Department figures show requiring sport utility vehicles, minivans and light trucks to meet the same fuel efficiency requirements as cars do (27.5 miles per gallon) could save 910,000 barrels of oil per day.

Cheney related that the task force had ruled out reducing the 18.4 cents per gallon federal gasoline tax to lower fuel prices because of the long-term impact it would have on highway funding. Congress, though, was seriously weighing the idea.

## Electric Deregulation

The U.S. Secretary of Energy will work with Congress to develop electric restructuring legislation that "promotes competition, protects consumers, improves efficiency and enhances reliability." In making the case for electric deregulation, the task force included a narrative contrasting Pennsylvania's experience in creating a vibrant, competitive electricity marketplace against what is happening in California.

"A major difference [between Pennsylvania and California] is that Pennsylvania took steps to ensure that procedures for adding new power plants were efficient," the section reads. "Unlike California, which imports 25 percent of its power, Pennsylvania is a net exporter of electricity. For these reasons,

Pennsylvania has ample electricity supply to meet demand while California is confronting a serious supply shortage.”

The energy plan also asks for repeal of the Public Utility Holding Company Act (PUHCA) of 1935. PUHCA restricts electric utility holding companies from owning utilities in more than one state and branching out into unrelated business activities.

Electric cooperatives fear that removing PUHCA protections will lead to increased utility consolidation, fewer choices and ultimately higher costs for consumers. As a result, cooperatives want PUHCA controls lifted only on utilities operating in states that have opened retail electric markets to competition, so consumers are protected against potential market power abuses.

Despite the ongoing California power debacle, the task force remained silent about short-term price controls for skyrocketing wholesale electricity prices in the West. President Bush and most congressional Republicans adamantly oppose any price caps, believing that they discourage Wall Street investors from financing new power plants.

### Heating Help

Funding for the Low Income Home Energy Assistance Program (LIHEAP) would be boosted by \$300 million annually — to \$1.7 billion — with the extra money coming from oil and gas royalty payments when crude oil and natural gas prices exceed a to-be-determined trigger amount. Tied to that, weatherization program appropriations would be increased by \$1.2 billion over 10 years — double the current commitment.

LIHEAP provides a critical safety net for low-income cooperative consumers since rural communities have limited access to alternative energy assistance sources, like private fuel funds used by many large cities. LIHEAP also helps distribution cooperatives absorb the costs of delinquent bills.

### Political Potpourri

In conjunction with his visit to Safe Harbor, President Bush signed two executive orders — one directing all federal agencies to include an “energy impact” statement with any proposed rule and the

other requiring expedited permits for energy-related projects.

He also met with 30 labor leaders to discuss how his plan could increase construction jobs. Some political pundits believe the meeting was simply an attempt by the White House to drive a wedge between environmentalists and labor, two strong Democratic constituencies.

Because the President’s energy outline focuses on the long term, congressional Republicans are anxious that voters may blame them for rising fuel prices during the 2002 mid-term elections unless immediate steps are taken. To prevent that from happening, Republicans are reviewing a list of short-term options, including suspending the federal gas tax; increasing refined petroleum imports from Canada, Mexico and Venezuela by removing environmental restrictions; limiting boutique fuels to three regional blends; and asking states to temporarily waive tolls on major roads during peak travel times. Some of the ideas could be incorporated into a bipartisan energy bill.

With control of Congress now divided for the first time since 1986, U.S. Sen. Jeff Bingaman (D-N.M.), chairman of the Senate Energy & Natural Resources Committee, anticipates a slow go in getting comprehensive energy legislation enacted this year.

“We need to take the time to be sure we’ve done the best we can to understand the problem,” he says. “I don’t want to see us rush through something half-baked.”

On the President’s energy plan, Bingaman believes that, with Democrats now in charge of the Senate, opening ANWR to oil and gas exploration is “dead,” giving FERC control over new high-voltage power lines will be “side-tracked” and funding for research into energy efficiency “could increase if we can get House Republicans to go along with it.” It is also expected that Senate Democrats will try to push through regulation of carbon dioxide emissions.

U.S. House Speaker Dennis Hastert (R-Ill.) wants to move energy legislation “as expeditiously as possible,” but in more than one bill “so people will know what is in it.” The approach is similar to what House Republicans have used in passing tax matters. 

# Clean Machines

Consumers shopping for new dishwashers can choose from a whole host of high-tech bells and whistles

by Sharon O'Malley  
Contributing Writer

**T**he new word in dishwashers is “hush-hush.” That is, some of the latest models make so little noise that you have to touch them to make sure they are running.

A spokesman for appliance maker Bosch claims the company has a machine that keeps noise levels to 46 decibels. Maytag, which switched from fiberglass insulation to polypropylene, says its units are so quiet they will not disturb a party, even if guests cluster in the kitchen.

GE Appliances reinforces dishwasher motors with insulation around the door, tub and toekick. Some models even have redirected sprays, so more water hits the dishes instead of squirting noisily against the tub and door.

The bottom line — consumers shopping for new dishwashers have myriad high-tech bells and whistles to choose from. Before buying, consider these

state-of-the-art extras designed to make dishes sparkle like never before:

- Whirlpool's PowerScour dishwashers have an extended wash cycle that removes baked-on food, eliminating the need to scrape, soak or scrub dishes before you load them.
- Some Bosch models contain a stainless-steel TallTub, in which you can load 10-inch long stemware on the top rack without laying it flat.
- Maytag's Jetclean dishwashers feature convertible tines that fold up for large bowls, pots or pans, then fold down for plates.
- GE Profile Performance Triton dishwashers spray dishes with three arms, so all sides of the dishes get washed.
- The GE Nautilus dishwasher has a patented Piranha Anti-Jamming Hard Food Disposer that pulverizes food particles before they go down the drain.
- Many new dishwashers have removable silverware baskets that fit on either top or bottom racks. Some have three interior racks instead of two and most allow the user to adjust the height of the shelves so you can load oversized platters and pots instead of washing them by hand.
- A few companies make dishwashers that heat up within a matter of a couple of minutes, meaning you do not have to wait to wash dishes after someone has just taken a shower or washed clothes.

## Getting Smart

While today's dishwashers come with a dizzying array of time- and energy-saving options, they operate much the same as they have since 1959, when tiny models were introduced for the home. A dishwasher combines water with detergent, heats the soapy mixture and sprays it against the dishes. It pumps out dirty water and then rinses the dishes with

clean water. Then it dries the wet dishes with heat or air.

But most of today's models — even those priced in the moderate \$300 range — employ soil sensors that make them “smart.” The sensors monitor the clarity of the wash water. When the water is dirty, the dishwasher works harder.

Maytag introduced smart technology in 1994 with its IntelliSense dishwasher, which used computer technology to “sense” when dishes were clean. Since then, notes Steve Birkenholtz, Maytag's director of dishwasher product planning, “We're making tremendous breakthroughs. Technology-equipped dishwashers are far more affordable than they were when they first appeared.”

Birkenholtz estimates that 30 percent of dishwashers today use sensors and more models will adopt them over the next few years.

Newer dishwashers also make more efficient use of water, a trend spurred by the federal government's Energy Star appliance rating program, says Chris Kaeser, Bosch's director of marketing.

Water flow is not the only thing microprocessors are controlling. Another common option is delayed start, which allows the user to program the dishwasher to turn on later — after the family is asleep, for instance — to take advantage of off-peak electricity rates late at night.

Still, consumers often consider style first when choosing a new unit. Because the kitchen is the hub for entertaining in most homes, the look of the dishwasher is important, notes Tom Admire, marketing manager for KitchenAid clean-up products.

“You don't want [the dishwasher] to be the focal point of the kitchen,” he says. “You want it to be sleek-looking, but not predominant.”

Sleek-looking to some means stainless steel, long a favorite in commercial kitchens. But because a stainless steel finish costs about \$100 more than a white finish, white, black and creamy off-whites still reign when it comes to sales.

High-end kitchens are showing off panel-covered dishwashers that match the room's cabinets. And bright colors are coming back into fashion for the kitchen; KitchenAid offers cobalt blue, hunter green, red and yellow.



Although the trend is toward roomier dishwashers, families with tiny kitchens do not have to fall back on scrubbing soiled place settings by hand. There are plenty of ultra-small dishwashers that hold a full load of standard-sized dishes. The Equator Mini-Maid countertop dishwasher, for instance, holds 40 pieces, but runs on 4.75 gallons of water in the heavy wash cycle (compared to 11 in standard dishwashers) and takes less than 20 inches of counter space. Fisher & Paykel has a compact unit called the DishDrawer whose exterior can be changed to match the cabinets.

Most startling may be dishwasher models that have not hit store shelves yet. Whirlpool has introduced a line of Internet-enabled appliances — refrigerators, ovens, dishwashers and microwaves — that can be interconnected. A command center mounted on the refrigerator controls all of the appliances and can even order groceries over the World Wide Web. 



## ENERGY ANSWERS



# Going Round and Round on Dryers

by James Dulley  
*Contributing Columnist*

If your old clothes dryer seems to run forever yet still leaves clothes either damp or wrinkled, a new energy-efficient model may be in order. Not only will the unit use less electricity, but with advanced features that virtually eliminate wrinkling and tangling problems (generally caused by overdrying), you cut down on the need for ironing and realize even greater utility bills savings.

The most critical component in selecting a new clothes dryer is the moisture sensor (which shuts off the heating elements when your desired level of dryness is reached). The best sensors are mounted inside the drum and actually monitor the clothes to accurately determine

their moisture level. One particularly effective sensor measures electrical resistance running through the clothes.

Simpler, less expensive "automatic" moisture sensors are less accurate because they determine clothes dryness in an indirect way. For example, some just measure air temperature in the exhaust. As clothes become drier, air temperature increases.

Regardless of the type of moisture sensor you choose, purchase a dryer with many settings so you can vary dryness by fabric type.

### Drum Beat

An auto-reversing drum is an excellent idea that can minimize wrinkling. By changing direction of the rotation every few minutes, clothes tumble freely

and do not tangle as much, allowing them to dry much quicker.

Other dryer options to look at include a no-wrinkle feature that tumbles clothes after they are dry until you remove them; a super-large lint filter; and an internal drying rack for delicate items.

Since a dryer vented outside draws cold, dry winter air or hot, humid summer air indoors (making your furnace or air conditioner run longer), you might want to consider a condensing dryer. These units — which can be placed anywhere in a home — are designed to be exceptionally quiet. Moisture from the clothes is condensed and flows into a small basin that you empty at the end of the drying cycle.

Another possibility to consider is a combination clothes washer/dryer. These space-saving, one-step appliances wash and dry clothes using the condensing process. You put in dirty clothes and take out clean dry clothes an hour or two later. They are ideal for older people who do smaller loads and cannot carry much weight up and down stairs.

Since successful clothes drying starts with the washing machine, it is critical to follow your washer's operating instructions. The final spin cycle is used to remove as much water from clothes as possible. When a washer is overloaded, extra moisture in clothes remains, forcing dryers to work harder. 

*James Dulley is a nationally syndicated energy management expert. For more information on this subject, request Dulley's "Utility Bills Update No. 591," which includes a buyer's guide on 15 vented, condensing and combination dryers listing sensor types, capacities, drum rotation and materials, sizes, features, prices and laundry efficiency tips. Send your request to: James Dulley, c/o Penn Lines magazine, 6906 Royalgreen Drive, Cincinnati, OH 45244. Please include \$3 and a business-size self-addressed stamped envelope. Or for quicker turnaround, check out [www.dulley.com](http://www.dulley.com) via the World Wide Web.*





COUNTRY KITCHEN

# Fruit-astic Foods

by Kitty Halke

*Contributing Columnist*

Summertime means fresh fruit is plentiful and ripe for the picking — in the backyard, at the supermarket or from the local produce stand. You can take advantage of this bounty with Mommie's Shortcake, an old family standby made even more delicious served under fresh sliced strawberries. Or try Spiced Peaches. Using canned or fresh, they are sweet and slightly tart at the same time. The elegant, yet easy-to-prepare Angel Berries Cake will impress the eye and please the palate using the "berry" best of the season.

*Kitty Halke is a cooking professional and freelance writer from rural Pennsylvania. Send recipes and comments to her in care of: Penn Lines, P.O. Box 1266, Harrisburg, PA 17108-1266.*

## SPICED PEACHES

29-oz. can sliced cling peaches  
(can use comparable amount  
of sliced fresh peaches,  
cooked until soft)  
1/2 cup brown sugar

1/2 cup apple cider vinegar  
6 whole cloves  
3 whole allspice  
2 cinnamon sticks



In saucepan, bring sugar, vinegar and spices to boil and simmer for 5 minutes. Drain peaches and add to saucepan. Cook approximately 5 minutes more. Remove from heat and allow to cool. Can be served warm or cold as a side dish or served over ice cream, shortcake, pound cake or angel food cake.

## MOMMIE'S SHORTCAKE

1/3 cup shortening  
2 cups flour  
2 tablespoons sugar

3 teaspoons baking powder  
1 teaspoon salt  
3/4 cup milk

Preheat oven to 350 degrees. Stir together flour, sugar, baking powder and salt, then cut in shortening with pastry blender or two butter knives used in criss-cross fashion until mixture resembles fine crumbs. Stir in milk until blended. Turn dough onto lightly floured surface and gently smooth into a ball. Knead 20-30 times, then roll out 1/2-inch thick. Cut dough with floured, three-inch-round cookie cutter and place dough pieces about one inch apart on ungreased cookie sheet. Bake 10-12 minutes, or until lightly browned. Top shortcakes with sweetened sliced strawberries and whipped cream.



## ANGEL BERRIES CAKE

3-4 cups fresh raspberries,  
blueberries or sliced  
strawberries, or a  
combination of all three  
2 teaspoons sugar  
2 tablespoons raspberry liqueur  
or raspberry-blended fruit juice

9-oz. prepared angel food cake  
(7 inches in diameter)  
12-oz. container frozen non-dairy  
whipped topping, thawed  
1 cup toasted sliced almonds

In medium bowl, combine berries, sugar and liqueur/juice; set aside. Cut cake in half horizontally. Carefully spoon half of berry mixture over bottom half of the cake and replace cake top. Spread top and sides of filled cake with whipped topping. Press almonds onto outside of cake. Just before serving, carefully spoon remaining fruit mixture and any remaining almonds on top of cake. Serve within one hour to prevent cake from becoming soggy.





RURAL REFLECTIONS



For the young among us (or simply the young at heart), July is perfect for frolicking in the yard, tooling around in the garden or just gazing out the back door. It's also a great time to capture moments for our 2001 "Rural Reflections" contest. You could be eligible for one of five \$50 year-end prizes.

Send your snapshots to: Penn Lines Photos, P.O. Box 1266, Harrisburg, PA 17108-1266. On the back of each photo, please include your name, address, phone number and the name of the electric cooperative that serves your home, business or seasonal residence.

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