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New Hampshire Department of Environmental Services

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## Air Resources

### Overview of HB 284

### The New Hampshire Clean Power Act Ground-Breaking Legislation to Reduce Multiple Harmful Pollutant From New Hampshire's Electric Power Plants

#### Background

When the federal Clean Air Act was passed, air pollutant emissions from power plants built before 1977 were "grandfathered." While new power plants had to comply with tight emission limits, these old plants, by and large, were allowed to continue to pollute at higher levels. New Hampshire has three such plants: Merrimack Station in Bow, Schiller Station in Portsmouth, and Newington Station in Newington. All three belong to Public Service of New Hampshire (PSNH).

In order to reduce emissions of several unhealthy pollutants, negotiations were conducted between PSNH, several New Hampshire environmental organizations, key state legislators, state environmental and energy officials, and the Governor's Office. A collaborative agreement on a comprehensive emissions reduction program was reached on November 2, 2001. This agreement was introduced as an amendment to HB 284, the New Hampshire Clean Power Act, and subsequently passed by the New Hampshire House of Representatives in January 2002.

When implemented, HB 284 will help enhance public health and the quality of New Hampshire's natural environment. These are two necessary ingredients for a high quality of life. Since New Hampshire's high quality of life is responsible for much of the extraordinary economic growth that the state experienced in the last decade, HB 284 will also help protect New Hampshire's economic advantage. Importantly, HB 284 can be expected to help build momentum for similar reductions across the nation.

#### Pollutants Addressed

HB 284 addresses emissions of four important air pollutants:

Sulfur dioxide (SO<sub>2</sub>) is the principal cause of the acid rain which harms our forests (and forest productivity) and reduces the ability of our lakes to sustain fish and other aquatic life. It's also the primary cause of fine airborne soot, which is inhaled deeply into the lungs and can trigger cardiac problems as well as respiratory effects. Nationally, fine particulate soot has been estimated to cause 64,000 premature deaths.

Nitrogen oxides (NO<sub>x</sub>) are the principal cause of ozone smog. Ozone is a potent lung irritant with serious human health consequences. It also impairs plant growth, producing negative agricultural and forestry impacts. NO<sub>x</sub> is also a secondary contributor to acid rain and fine particulate matter.

Mercury is a persistent neurotoxic heavy metal that accumulates in the food chain, mainly through fish, and is dangerous enough to have led to fish consumption advisory warnings throughout most states in the country. Similar to lead, its principal health impacts are impairing the neurological development of fetuses. It has similarly negative impacts on wildlife, including the common loon

Carbon dioxide (CO<sub>2</sub>) is the principal gas responsible for the climate altering affects (aka "global warming") that are already being seen in New Hampshire. New Hampshire's north country is already warming at a rate almost three times the regional average, which threatens skiing, foliage, sugar maples, and trout fishing – all key components of our recreational industry. The best available science suggests that New Hampshire's climate will resemble that of Virginia or North Carolina by the turn of this century.

### What Does HB 284 Do?

HB 284 "caps" emissions from PSNH's power plants. These caps are *annual* (i.e., they apply all year round, not just in the summer ozone season), and they are "*output-based*," which encourages more efficient generation than traditional "input-based" regulation. In addition, emissions trading (i.e., the ability to comply with reduction requirements by purchasing reductions made elsewhere if doing so is more cost-effective) is allowed for SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub>.

HB 284 requires:

- **Sulfur dioxide** emissions to be reduced 87% from 1999 levels by the end of 2006. This is the same cap as the original bill, but achieved a full year earlier.
- **Nitrogen oxides** emissions to be reduced 70% from 1999 levels by the end of 2006. This too is the same cap as the original bill, and it will also be achieved a full year sooner.
- **Carbon dioxide** emissions to be reduced to 1990 levels by the end of 2006. This change aligns the target for carbon reductions with those of the New England Governors and Eastern Canadian Premiers *Climate Change Action Plan*, adopted in August 2001.
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- That a cap for **mercury** emissions be recommended to the Legislature by the Department of Environmental Services by early 2004. This schedule allows the cap to be set taking into account a specific assessment of mercury emissions from PSNH's facilities and the results of federal mercury limits that will be proposed by the US EPA in late 2003.

HB 284 also includes innovative new incentives to encourage PSNH to comply with the above caps in ways that will most benefit the state. Specifically:

- Voluntary expenditures by PSNH for energy efficiency, renewable energy, and conservation programs can be converted into allowances to help comply with the caps.
  - If PSNH reduces its direct emissions below a three-year moving average, it can get credit for those reductions the following year.
  - If PSNH acquires allowances from other states directly upwind from New Hampshire, it will get a premium over allowances acquired from more remote states.
- **Bottom Line:** When passed, the HB 284 will be the best multi-pollutant emissions control program to be approved by any legislature in the country.

### Conclusion

HB 284 reflects the best traditions of New Hampshire environmental leadership. It represents a consensus approach – among leading environmentalists, PSNH, and the State – regarding the need for additional emission reductions and the manner in which they can be most cost-effectively and expeditiously achieved. It creates significant new, market-based incentives rather than relying on traditional, site-specific command and control regulation. Further, since emissions in upwind states contribute significantly to air quality problems in New Hampshire, this plan shows that the State of New Hampshire points upwind with "clean hands," making the same reductions ourselves that we ask of upwind states. Finally, this action by New Hampshire should advance and expedite the debate in Congressional about multi-pollutant emission reductions by demonstrating that reasonable, effective consensus approaches are achievable.

### Update

HB 284 passed and became effective on July 1, 2002. The law can be found at <http://www.gencourt.state.nh.us/rsa/html/indexes/125-O.html>.

*Updated: November 2002*



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