Since 1992, four of the nine nuclear reactors in New England closed. Poor economics, age-related deterioration, and sustainable solutions will shut the remaining five. Decommissioning, the process of “cleaning up” reactor sites is becoming an issue throughout the region. Precedents, governing future decommissionings, developed in New England. CAN’s experience is that site cleanup is a dangerous process full of pitfalls aimed at saving corporate money rather than cleaning contaminated sites.

The Rowe reactor’s experimental decommissioning forced the downstream community to question how reactors decommission and how corporations dispose of waste. It raised ethical questions involving pollution prevention and reduction, site remediation and environmental justice. Since standard reactor operation releases rad waste routinely into the environment and stores its high level waste on site, the community itself is a de facto waste dump.

Citizens in the contamination pathway of reactors must protect themselves and the environment from the effects of exposure to radiation and develop strategies to prevent and eliminate nuclear pollution.

**ENVIRONMENTAL INJUSTICE:**

Communities that suffer nuclear contamination are usually poor, rural and people of color. It is unacceptable for people to choose between short-term economic survival and the sacrifice of future generations.

There are no easy solutions to clean up of these toxic sites. Much of the pressure to move rad waste off-site comes from nuclear waste generators, but communities also seek rapid dismantlement to protect themselves and their environment. However we are not necessarily served by enabling reactors to decommission rapidly, exposing people to increased radioactivity. Dismantlement is a complicated, dangerous process. Its results are too important to reactor communities for citizen input to be stifled.

As the first, Yankee Atomic’s illegal decommissioning set dangerous standards—standards that undermine the democratic process guaranteed under the Atomic Energy Act, undermine EPA regulations governing the National Environmental Policy Act and create de facto deregulation of the industry for decommissioning and rad waste. Corporate revision of regulations forced continual relaxation of standards and undermined and degraded NRC’s accountability as the protectors of the public health and safety.

With Yankee Rowe as the standard, there is no distinction between reactor operation and cessation and therefore regulations developed for operating reactors (when on-site resident inspectors and NRC inspections are routine) were cobbled on to decommissioning processes in which inspection is scanty and discretionary. No adjudicatory hearings are available to impacted communities. NRC oversight is curtailed since NRC decided that decommissioning is no longer a major federal action. Therefore EPA requirements are ignored.

Nuclear corporations now submit generalized plans providing no detailed description of specific activities. The choice of decommissioning option is determined by the operator without input from the community. Reactors are stripped, transported and dumped in another community without adequate public or regulatory oversight. “Community Advisory Boards” orchestrated, established, and run by corporations function as public relations arms and substitute for adjudicatory hearings.

**THE ROWE DECOMMISSIONING HISTORY: REGULATORY ANARCHY**

After thirty years of operation, the oldest commercial nuclear reactor shut down in 1992 due to local organizing efforts concerning age-related problems. When Rowe ceased operation, it announced its intention to remain in SAFSTOR (long-term, on-site storage designed to reduce radioactivity of most waste by a factor of ten) while developing a decommissioning plan. However in 1993, the NRC allowed Yankee Atomic to dismantle Rowe. This included shipping highly irradiated parts to a radioactive waste dump in South Carolina. Prior to 1993, NRC rules required submission and approval of a decommissioning plan before major dismantlement could begin. This process required a NEPA review including preparation of an Environmental Impact Statement.

In 1993 NRC changed its rule to permit the corporation to strip and ship the reactor before the approval of the plan. In fact, over 95% of the radionuclide inventory was removed without an approved plan. NRC denied CAN’s requests for a hearing on problems created by Yankee’s rapid dismantlement. Besides our community’s concerns about our health and safety, a dangerous and undemocratic precedent was being set. A slow and thorough decommissioning minimizes worker and public exposures, dramatically reduces burial waste, is more cost effective and continues to employ the skilled workforce in cleanup actives for a decade.

Over 140,000 curies were removed from Rowe and shipped off-site; much of it transported down the Eastern seaboard and buried in Barnwell, South Carolina. If this waste had remained on-site for thirty years, curie count would have decreased to 14,000 curies minimizing exposure, burial contamination and costs.

**A MELTDOWN IN DEMOCRACY**

Having repeatedly requested hearings on Rowe’s decommissioning over a three year period, CAN took NRC to court to address the violation of our due process rights and stop the stripping of the reactor. The District court was forced to send the case to the Appellate Court. However, Federal District Court Judge Ponser stated “The Court makes this decision with a heavy heart. …This course of conduct [by NRC] suggests a concerted bureaucratic effort to thwart the efforts of local citizens to be heard about an event that vitally effects them and their children. It
calls to mind the activities of Charles Dickens’
fictional Office of Circumlocution in Bleak House.
The prospect that this tactic may be used nationally,
as more nuclear plants shut down, and more local
citizen’s groups express concern about the impact
of the process on their lives, is, to put it mildly,
disquieting.”

After two years of litigation the U.S. Court of Appeals
ruled that a hearing on the issues raised in
decommissioning Yankee Rowe was necessary. The
court found NRC “arbitrary, capricious, and utterly
irrational” in its approval of decommissioning of
Rowe. Yankee’s decommissioning was scathingly
rejected. The justices found NRC actions irresponsible ... “An agency can not skirt NEPA or
other statutory commands by exempting a licensee
from compulsory compliance, and then simply
labeling its decision "mere oversight" rather than a
major federal action.”

The Court objected: “As this construct would
eviscerate the very procedural protections Congress
envisioned in its enactment of section 189a [Atomic
Energy Act] we decline to permit the commission to
do by indirectness what it is prohibited from doing
directly.” NRC VIOLATED THE ATOMIC ENERGY ACT,
NATIONAL ENVIRONMENTAL POLICY ACT, AND
ADMINISTRATIVE PROCEDURES ACT. In fall 1995 NRC
offered CAN an “opportunity for a hearing”.

CAN advanced “contentions” demonstrating the
inadequacy of Yankee’s plan. Throughout the hearing
process, NRC resisted our participation. The NRC
Licensing Board, NRC’s adjudicatory arm, rejected our
contentions although they ruled that we had the right
to represent worker and public concerns. This
arbitrary rejection followed a course of conduct by
NRC to eliminate meaningful public participation. CAN
again appealed.

Piercing the Corporate Veil

During this time CAN uncovered discrepancies in the
utility’s records concerning worker exposures. We
submitted information to the Commission. The
Commission ruled that our contention on excessive
worker exposure had merit and ordered the Licensing
Board to review it again. A second pre-hearing was
held in Washington, DC.

The Licensing Board accepted our contention and set
a precedent by (1) giving CAN STANDING TO
REPRESENT THE WORKER’S HEALTH AND SAFETY
INTERESTS, (2) allowing CAN TO QUESTION THE DOSE
ESTIMATES OF A CORPORATION AND DECOMMISSIONING
CHOICES BASED ON THOSE ESTIMATES, and (3) allowing
ACCESS TO CORPORATE DOCUMENTS.

During discovery, we uncovered evidence of
excessive worker exposures. CAN obtained
information that challenged Yankee dose estimates
and procedures for calculating “decommissioning
doses” for the workers and the public. Even though
CAN raised questions about the corporation’s
procedures which hid the actual doses to the
workers and the public, once again NRC denied our
hearing rights.

THE FUTURE: DIRTY, CHEAP, AND
ILLEGAL

Dangerous and irresponsible precedents for
decommissioning and rad waste disposal are
resulting from NRC’s actions. NRC codified the Rowe
experience (in direct opposition to the Appellate
Court) in a new decommissioning rule, which
deregulates decommissioning and minimizes NRC
oversight.

STRIP AND SHIP FOR NEW ENGLAND NUKES

In December of 1996, the CT Yankee reactor in
Haddam permanently shut down, as did the Maine
Yankee reactor. These utilities organized rapid
dismantlements. Decommissioning had significant
health and safety implications for these communities
and reactor workers. Since these were the first
large-scale commercial reactors to decommission
under the new rule, NRC nullified our court victory by
promulgating regulations that bar citizens from
questioning a licensee’s choice of decommissioning
alternatives at an adjudicatory hearing

EVEN CHEAP IS COSTLY!

Decommissioning exposes the dirty underbelly of
nuclear power and its catastrophic costs. Yankee
Rowe, which cost $39 million to build cost over $750
million to clean up and took over 15 years with a
rapid dismantlement. With inadequate
decommissioning funds, it was able to get the state of
Massachusetts to allow the corporation to charge its
customers for a shuttered reactor.

Due to significant contamination on site and in ground
water, Rowe’s costs skyrocketed. This is not
unusual. CT Yankee in Haddam Connecticut cost over
$1.2 billion to clean up, and CT Light and Power
customers will continue to pay for a shuttered reactor
until 2015! It is unclear how merchant corporations
will be held responsible for escalating cleanup costs.

What is demonstrated in cleanup is the colossal
failure of nuclear power through soaring costs and
with public utilities, ratepayers charged for
decommissioning on closed reactors that no longer
contribute to the public good. Nuclear corporations
routinely underestimate cleanup costs to hide the
truth about the industry’s unfounded claims that
nuclear is clean and green.

WE CAN DO BETTER!

Rancho Seco, a California reactor owned by the
Sacramento Municipal Utility District (SMUD) and shut
by referendum, did not have adequate
decommissioning funding. SMUD chose a slow and
thorough cleanup employing the skilled workforce and
replacing the power with sustainable energy
solutions as well as conservation and efficiency.
SMUD is the 6th largest public utility in the country. It is
an excellent example of what can be done.

FOR MORE INFORMATION:

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