Future Fission: Why Japan Won’t Abandon Nuclear Power

By Daniel P. Aldrich

The nuclear plant disaster triggered by March’s earthquake and tsunami triggered soul-searching over its scale and the slow reaction. Some lay the blame on amakudari, a phrase describing the cozy relationship between Japanese government regulators and the industries they regulate.

Daniel P. Aldrich explores the allegations and outlines a range of reasons why Japan’s government will not waver from its commitment to champion nuclear energy.

AS JAPAN CONTINUES to recover from the devastating effects of the massive 9.0 earthquake and the resulting tsunami on March 11 that killed more than 18,000 people, left huge swaths of northeastern coastal regions in ruins and caused the worst nuclear disaster since Chernobyl in 1986 at the Fukushima Dai-ichi nuclear plant, many observers in Japan and abroad are wondering how authorities could have placed nuclear reactors in such low-lying, vulnerable areas and have expressed strong concerns about the slow release of information to the public.

Recently, an observer of Japan noted on Twitter that “Amakudari kills” — a reference to a term popularized by Chalmers Johnson in his classic book, MITI and the Japanese Miracle. Meaning literally “descent from heaven,” amakudari was used by Johnson to describe the long-term, strong ties between industry, government and politicians in Japan. Many people are now asking whether the country’s nuclear accident and ongoing crisis can be blamed on amakudari.

A recent Associated Press article argued that a “culture of complacency” permeated the nuclear regulatory environment in Japan and that “willful ignorance” among the bureaucrats responsible for regulating nuclear power allowed Tokyo Electric Power Company (TEPCO), the private utility that runs the Fukushima Dai-ichi plant, to get away with cutting corners. Johnson focused on the common practice of Japanese bureaucrats retiring and then moving into the industry they once regulated. As a result, college students who graduate from prestigious universities such as Todai (Tokyo University), Waseda and Keio and en-

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ter the civil service can predict with confidence their positions three decades hence. When bu-
reaucrats in central government ministries such as the Ministry of Economy, Trade, and Industry
(METI, formerly known as MITI, or the Ministry of International Trade and Industry) retire from
their jobs between the ages of 50 and 55, many move into high-level executive posts in the pri-
vate industry they regulated.

ARE ‘CONNECTIONS’ TO BLAME?
To be sure, Japan is not the only advanced in-
dustrial democracy in which such connections
between industry and regulators are strong —
Washington DC has its “revolving door” where politicians and retired generals become K-Street
lobbyists for commercial interests, including the
military industrial complex, while France has pan-
touflage among its civil servants, who land cushy
jobs in the private sector. But in Japan, these par-
allel frameworks of influence and information are particularly institutionalized. Officially, US
law requires civil servants to wait one year before
they can join private firms in certain industries.
Japan has similarly tried to ban amakudari prac-
tices outright. Nonetheless, scholars and report-
ers alike have uncovered clear patterns that Todai
graduates continue to move with regularity from
extended service in the public sector to more lu-
crative positions in the private sector. A quarter of
private sector firms studied by Richard Colignon and Chikako Ussai in their book, Amakudari: The
Hidden Fabric of Japan’s Economy, had at least one
amakudari member on their board. A recent
AP news article reported that 26 of 95 nuclear
regulators have been “affiliated either with the
industry or groups that promote nuclear power.”

Many scholars of amakudari have empha-
sized that in addition to creating networks along
which information can be passed effortlessly be-
tween parties, the system also creates a situation
in which bureaucrats have strong incentives to
overlook infractions. These connections naturally
can make individuals less willing to criticize their
future employers and create strong conflicts of in-
terest as they seek to balance future employment
prospects against the need for punitive regulatory
action. Further blurring the lines for civil servants
is the fact that many agencies are simultaneously
asked with promoting an issue — such as nuclear
power — and regulating it.

Despite the rise of the Democratic Party of Japan
(DPJ), which came into office on a platform that
was strongly anti-bureaucracy, the nexus of influ-
ence among the long-ruling Liberal Democratic
Party (LDP), METI’s Agency for Natural Resources
and Energy (ANRE), which oversees and promotes
nuclear power, and TEPCO — known as “the iron
triangle” or “the nuclear village” — has been main-
tained. Jacques Hyman, Professor of International
Relations at the University of Southern California,
and others have emphasized that the DPJ has not
moved to devolve power from the iron triangle de-
epite opportunities to do so.

Recently, the Japanese press reported that the
former head of ANRE left his job overseeing nu-
clear reactors to move into a post advising TEPCO.
He stepped down in late April in response to the
furor created by the news reports. A New York
Times article, meanwhile, reported that over a pe-
riod of five decades, a number of METI officials
successively served as TEPCO vice presidents.
Japanese newspapers have alleged additional
close links between TEPCO and LDP politicians,
claiming that TEPCO has donated more than
$200,000 to the LDP over the last three years.

Such reports are hardly surprising given nu-
umerous past influence-peddling scandals involv-
ing ties between private and public sector person-
nel at different levels of government — such as
the Lockheed scandal in 1976 involving bribes
paid to government officials by the US aerospace
company or the Recruit scandal in 1988 in which
the human resources company offered insider-
trading opportunities to Japanese politicians,
which led many of them to resign when the scan-
dal became public.

However, claims that amakudari itself is some-
how responsible for the slow release of informa-
tion on the current nuclear disaster and the poor
response — or even the lax oversight that result-
ed in the vulnerable placement of the reactors —
are hard to swallow. In fact, evidence points to
the contrary. First, Prime Minister Naoto Kan was
clearly out of the information loop, suggesting that
an idealized amakudari model was not at work. In
fact, Kan publicly lost his temper with TEPCO —
an uncommon reaction for a Japanese politician
— arguing that he was not getting enough infor-
mation to make public updates; the Kyodo news
agency reported him yelling, “What the hell is go-
ing on?” at utility executives. Second, Akira Omito,
a member of Japan’s Atomic Energy Commission,
disclosed that TEPCO itself initially resisted using
salt water to cool the reactors because company
executives feared it would cause permanent dam-
age to their expensive machinery. In other words,
TEPCO’s reluctance to act faster had nothing to
do with its relationship with the government; fur-
thermore, it did not consult with nuclear regula-
tors for their opinion on the matter.

Third, the claim that the Fukushima Dai-ichi
disaster could have been avoided had METI more
tightly regulated the industry and perhaps forced
TEPCO to create tsunami-proof reactors (or at
least better locate backup systems) is not en-
tirely fair, given the “black swan” nature of the
event. Nuclear power plants are designed with
defense in depth, and many critics have seen the
crisis as proof of the safety even of 41-year-old
technologies in the field: despite a lack of bat-
teries and additional backup systems, the re-
tactors have done fairly well, with the vast
majority of dangerous radioactive ma-
terials remaining within the reactors. The
placement of backup systems on
low ground was clearly a mistake,
but one that was unrelated to insti-
tutional connections between the in-
dustry and government. Disaster man-
agement officials in New Orleans found
their own backup systems similarly flooded fol-
lowing Hurricane Katrina, but few would argue
this was a result of business-government rela-
tionships. Finally, most studies of the relation-
ship between industrial sectors and the Japanese
government have characterized them as collab-
orative but often antagonistic; this was certainly
true in Richard Samuel’s book, The Business of
the Japanese State (which focused on energy poli-
cy and the “reciprocal consent” between the pub-
lic and private sectors), and Scott Callon’s book, *Divided Sun* (which showed tremendous stresses in the high tech policy field). This adversarial relationship can be seen in recent calls from Chief Cabinet Secretary Yukio Edano for TEPCO to face unlimited liability for the accident, rather than allowing a limit on damages.

**PROMOTING NUCLEAR POWER**

Rather than viewing the nuclear crisis through these more obvious institutional connections between the public and private sectors (which can be found in many industrialized nations), observers should, I believe, pay more attention to the institutions created by the central government to increase public acceptance of nuclear power and decrease negative reactions. Japanese decision makers have systematically sought to manipulate opinion on nuclear power since the late 1960s. Bureaucrats within ANRE have built a wide variety of policy instruments to bring public opinion in line with their goals of energy security and widespread use of nuclear power. These include an invisible tax on electricity use (called the *Dengen Sanpô*) that funnels hundreds of millions of yen in cash and infrastructure projects to communities that host nuclear power plants; the creation of public school science curricula written by bureaucrats emphasizing the safety and necessity of nuclear power; and annual fairs held exclusively for farmers and fishermen from areas near nuclear reactors to ensure that they have a market for their goods, despite concerns about nuclear contamination. Where the US government, despite regularly proclaiming its support for nuclear power, has been content to allow the market to dictate the industry’s fate, the Japanese government has taken a very hands-on approach to the issue. As I detailed in my book *Site Fights*, it has been a promoter of nuclear power, overcoming the widespread “nuclear allergy” created by the atomic bombing of Hiroshima and Nagasaki, and the Lucky Dragon Incident — in which a Japanese tuna boat was contaminated by radiation from a US hydrogen bomb test in 1954, killing the boat’s chief radioman — to create one of the most advanced nuclear power programs in the world.

Furthermore, the decisions to locate many of these nuclear facilities in low-lying, vulnerable areas are not random, nor are they due solely to technocratic criteria, such as access to water, location on seismically bedrock, and so forth. Instead, as I argued in an analysis in my book of 500 towns and villages in Japan, authorities placed nuclear power plants and other “public bads” in localities that displayed fewer signs of civil society activism. By putting atomic reactors in areas that would be less likely to resist, the government worked with TEPCO and other utilities to avoid public resistance and to speed up the siting process, which otherwise can take decades.

**STAYING ON COURSE**

Local residents, who previously saw nuclear power as a way of generating jobs and revenue for impoverished, depopulating rural communities, are now expressing mounting anxiety and anger. “I’ve been told by TEPCO since I was very young that the nuclear power plant was safe, so I never imagined this would happen,” one local resident told a reporter. TEPCO promised compensation of roughly $12,000 per household affected by the disaster, but many view the money as a band-aid that ignores the larger wound. The incident has triggered increasing resistance to nuclear power, culminating in recent rallies where some 17,500 people in downtown Tokyo in late April and more than 15,000 in Tokyo’s Koenji neighborhood in early May marched against atomic plants. These large-scale rallies opposing nuclear power are a new phenomenon.

Opinion polls, meanwhile, show rising levels of opposition to nuclear power among the broader Japanese population. An Asahi *Shimbun* poll conducted by telephone on April 20 indicated that 41 percent of the respondents opposed nuclear power or wanted the number of plants reduced; this is a jump from a 2007 poll in which fewer than 29 percent reported similar opinions.

Despite any new domestic concerns about nuclear power and international criticism of Japan’s nuclear program, I find it very unlikely that the Japanese government will deviate from its long-term plan of creating “energy independence” through extensive reliance on nuclear power. The most likely scenario has authorities temporarily suspending plans for new plants and the introduction of mixed oxide (Mox) fuel into existing reactors to help close the nuclear fuel cycle. Since former Prime Minister Yasuhiro Nakasone (then a young member of parliament) single-handedly created a number of institutions to promote nuclear research in the early 1950s, Japan has tied its energy future deeply to nuclear power — especially so after the oil-price shocks of the mid-1970s, which created a shared belief that dependence on oil and natural gas would tie Japan to politically unstable regions of the world.

The Fukushima Dai-ichi disaster, while reaffirming the suspicions of anti-nuclear activists and raising the anxiety of many local residents, will not alter the Japanese government’s commitment to nuclear power. It has invested tremendous resources into promoting and developing nuclear power, and beyond these economic and administrative costs, there are few bureaucrats or powerful politicians interested in or willing to challenge the nuclear status quo. While many outsiders may hope that the ongoing crisis will shake up Japan’s cozy nuclear village, which has long imagined local opinion to be malleable and envisioned opponents of nuclear power as targets for persuasion, Japan’s energy plans will continue to revolve around atomic energy, no matter the cost.

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