

## 16. Recovery from Fukushima

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In thinking about the content of my essay, I intended to develop a theme that was uplifting and would provide encouragement to persons associated with the Fukushima accident and recovery. Needless to say, I found this to be very difficult.

Certainly, the personnel and staff associated with the operation of the Fukushima plant are suffering. Similarly, most members of the nuclear community on an international level are suffering or in a state of shock.

I have worked in the nuclear industry for nearly 40 years and have consistently assured my family and friends that a severe nuclear accident involving the release of radioactive material and evacuation of residents would not happen. I explained to them that every credible accident initiation event had been identified and evaluated. I further explained that design features were put in place to prevent such an accident.

Needless to say, I find it very difficult to discuss such matters with my friends right now. I simply cannot provide such assurance anymore. I will admit that I find myself shying away from any discussion of nuclear power. I fear that my friends that trusted my advice may feel that I am no longer trustworthy. My local newspaper has published letters from people expressing concern and anger

and calling for an end to nuclear power generation.

All of my colleagues have experienced some level of shock. It would be easy for the scope and extent of the accident to shake our confidence in the safety and viability of nuclear power. It would be understandable for some persons to question the role of nuclear power in the future.

However, at least for the foreseeable future, nuclear power will undoubtedly play an important role in the availability of electrical power in Japan. Nuclear power must continue to be generated. The recent Japanese government-imposed requirements to conserve energy and reduce power consumption will not alleviate the need for nuclear power.

Since nuclear power must continue to be generated in Japan, it is necessary for a broad recovery to occur. Recovery of confidence by members of the industry is absolutely necessary. Although recovery of public trust may be very difficult, recovery of their acceptance of nuclear power must be pursued.

With members of the nuclear industry questioning their confidence and with the public expressing increased distrust and anger, this recovery will be difficult.

My message is that, however difficult, the recovery must begin. This period of shock and questioning attitude we are currently experiencing is the first step.

As an industry, we must use the event as a learning experience. We must pause and ask serious questions. Eventually, we must develop answers and solutions. We must apply lessons learned to all nuclear generation facilities even if that means we ultimately transition generation away from plants in which we cannot reasonably establish complete confidence. There are members of the public that will not be satisfied with the solutions; however, we must satisfy ourselves that our solutions result in a truly safe industry.

I feel that it is of utmost importance that the public be kept informed and feel like they are involved.

As an example, the plant at which I spent the majority of my career, Diablo Canyon, has recently been involved in efforts to renew the plant operating license. The current license expires in 2024 and the utility is pursuing a 20 year license extension. As a result of the Fukushima accident, the utility, Pacific Gas and Electric Company, and the Nuclear Regulatory Licensing Board have agreed to postpone the license renewal efforts. They believe that additional time is needed to perform additional studies and evaluations. PG&E engineers will more fully evaluate earthquake faults near the plant. They will also study lessons learned from the Fukushima accident. The postponement is estimated to delay the relicensing by approximately 4 years.

Pacific Gas and Electric Company has made this delay known to the public.

The postponement was made partly because of an outcry by members of the public following the Fukushima accident. The postponement provides some assurance to the public that Pacific Gas and Electric Company is taking the accident very seriously. It also makes the public feel that their concerns have been heard and being acted on. I believe that by allowing public involvement, Pacific Gas and Electric Company will experience a reduced level of public opposition, anger and distrust.

Lastly, my thoughts are with the workers in the Japanese nuclear industry. I know that many are in shock and are suffering. Japanese public opinion seems to be strongly against nuclear power generation. Distrust and anger are greater than ever.

I have had the pleasure of meeting with many engineers from Japanese nuclear power plants and have become aware of their extremely high level of dedication, competence and pride. It must be very difficult for these individuals to deal with the public reaction to the Fukushima accident.

However, even with the pain and suffering these workers must be experiencing, their work in providing safe and reliable power is far more important now than ever before.

August 2011