The situation continues to be very dangerous.

How bad are things? From the <u>NY Times</u>:

The risk of a meltdown spread to a third reactor at a stricken nuclear power plant in Japan on Monday as its cooling systems failed, exposing its fuel rods, only hours after a second explosion at a separate reactor blew the roof off a containment building...

Operators fear that if they cannot establish control, despite increasingly desperate measures to do so, the reactors could experience full meltdowns, which could release catastrophic amounts of radiation. The two reactors where the explosions occurred are both presumed to have already suffered partial meltdowns — a dangerous situation that, if unchecked, could lead to full meltdowns.

What would the impacts of a meltdown be? From the <u>Washington Post</u>:

The potential size of the area affected by radioactive emissions could be large. A state of emergency was declared briefly at another nuclear facility, the Onagawa plant, after elevated radioactivity levels were detected there. Later, Japanese authorities blamed the measurement on radioactive material that had drifted from the Fukushima plant, more than 75 miles away, according to the International Atomic Energy Agency.

The IAEA noted that forecasts said winds would be blowing to the northeast, away from the Japanese coast, over the next three days.

UPDATE: According to the <u>Washington Post</u>, there have been long-standing concerns about the containment vessel used in this particular reactor model. In addition, these vessels were apparently at the end of their useful lives and may be brittle.