

NUCLEAR REGULATORY COMMISSION
MASSACHUSETTS INSTITUTE OF TECHNOLOGY REACTOR
NOTICE OF ISSUANCE OF RENEWED FACILITY OPERATING
LICENSE NO. R-37
DOCKET NO. 50-020 [NRC-2010-0313]

The U.S. Nuclear Regulatory Commission (NRC) has issued renewed Facility Operating License No. R-37, held by the Massachusetts Institute of Technology (the licensee), which authorizes continued operation of the Massachusetts Institute of Technology Reactor (MITR-II), located in Cambridge, Middlesex County, Massachusetts. The MITR-II is a tank-type, light-water-cooled-and-moderated, heavy-water-reflected research reactor licensed to operate at a steady-state power level of 6 megawatts thermal power. Renewed Facility Operating License No. R-37 will expire at midnight 20 years from its date of issuance.

The renewed license complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in Title 10, Chapter 1, "Nuclear Regulatory Commission," of the *Code of Federal Regulations* (10 CFR), and sets forth those findings in the renewed license. The Agency afforded an opportunity for hearing in the Notice of Opportunity for Hearing published in the *Federal Register* on May 8, 2008, at 73 FR 26148. The NRC received no request for a hearing or petition for leave to intervene following the notice.

The NRC staff prepared a safety evaluation report for the renewal of Facility Operating License No. R-37 and concluded, based on that evaluation, that the licensee can continue to

operate the facility without endangering the health and safety of the public. The NRC staff also prepared an Environmental Assessment and Finding of No Significant Impact for license renewal, noticed in the *Federal Register* on October 5, 2010, at 75 FR 61220, and concluded that renewal of the license will not have a significant impact on the quality of the human environment.

For details with respect to the application for renewal, see the licensee's letter dated July 8, 1999 (ML080950435), as supplemented by letters dated February 10 (ADAMS Accession Nos. ML003683419, ML052900533, ML053190234, and ML053190384), and May 8, 2000 (ADAMS Accession No. ML081000625), January 29, 2004 (ADAMS Accession No. ML081000626), July 5 (ADAMS Accession No. ML061930319), and October 11, 2006 (ADAMS Accession No. ML063340716), January 26, 2007 (ADAMS Accession No. ML070320555), February 22 (ADAMS Accession No. ML081000627), May 29 (ADAMS Accession No. ML081560246), August 15 (ADAMS Accession No. ML082350069), 21 (ADAMS Accession No. ML082401050), and 26 (ADAMS Accession No. ML082470562), October 6 (ADAMS Accession No. ML082900488) and 7 (ADAMS Accession No. ML082910241), and December 1, 2008 (ADAMS Accession No. ML083430006), May 26 (ADAMS Accession No. ML091540202), August 27 (ADAMS Accession No. ML092450427), October 5 (ADAMS Accession No. ML092930273), October 9 (ADAMS Accession No. ML092930278), and November 19, 2009 (ADAMS Accession No. ML093290155), and March 30 (ADAMS Accession No. ML100970368), August 6 (ADAMS Accession No. ML102310032), and August 26, 2010 (ADAMS Accession No. ML102440122). Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records will be accessible electronically from the Agencywide Documents Access and Management System (ADAMS) Public Electronic Reading Room on the NRC Web site, <http://www.nrc.gov/reading-rm/adams.html>. Persons who do not

have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC PDR Reference staff at 1-800-397-4209 or 301-415-4737, or send an email to pdr@nrc.gov.

Dated at Rockville, Maryland, this 1st day of November, 2010.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Jessie Quichocho, Chief
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