

NATIONAL SCIENCE FOUNDATION**Notice of Permit Applications Received Under the Antarctic Conservation Act of 1978 (Pub. L. 95-541)****AGENCY:** National Science Foundation.**ACTION:** Notice of permit applications Received Under the Antarctic Conservation Act of 1978, Public Law 95-541.**SUMMARY:** The National Science Foundation (NSF) is required to publish notice of permit applications received to conduct activities regulated under the Antarctic Conservation Act of 1978. NSF has published regulations under the Antarctic Conservation Act at Title 45 part 670 of the Code of Federal Regulations. This is the required notice of permit applications received.**DATES:** Interested parties are invited to submit written data, comments, or views with respect to this permit application by May 13, 2011. This application may be inspected by interested parties at the Permit Office, address below.**ADDRESS:** Comments should be addressed to Permit Office, Room 755, Office of Polar Programs, National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230.**FOR FURTHER INFORMATION CONTACT:** Nadene G. Kennedy at the above address or (703) 292-7405.**SUPPLEMENTARY INFORMATION:** The National Science Foundation, as directed by the Antarctic Conservation Act of 1978 (Pub. L. 95-541), as amended by the Antarctic Science, Tourism and Conservation Act of 1996, has developed regulations for the establishment of a permit system for various activities in Antarctica and designation of certain animals and certain geographic areas requiring special protection. The regulations establish such a permit system to designate Antarctic Specially Protected Areas.

The applications received are as follows:

Permit Application No. 2012-001

1. *Applicant:* Paul Ponganis, Center for Marine Biotechnology and Biomedicine, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, CA 92093-0204.

Activity for Which Permit Is Requested

Take and Import into the U.S.A. The applicant plans to capture up to 10 fledgling emperor chicks for research studies at University of California, San Diego. The volume of the air sacs and

lungs are critical to the diving physiology of penguins in at least two ways. First, the respiratory oxygen store is estimated to comprise one-third to one-half the total body O₂ stores in various species. And second, the ratio of air sac to lung volume is a potential mechanism for prevention of pulmonary barotrauma ("lung squeeze"). Yet the volumes of the air sacs and lungs have never been directly measured in any penguin species. There have only been indirect estimates based on simulated dives in pressure chambers or on buoyancy-swim speed calculations during dives at sea. Therefore, in this research project, air sac and lung volumes in emperor penguins (*Aptenodytes forsteri*), king penguins (*A. patagonicus*), and Adélie penguins (*Pygoscelis adeliae*) will be measured by 3D reconstructions from computerized tomography (CT) and magnetic resonance imaging (MRI) scans. The study, to be conducted in collaboration with the University of California San Diego Keck Center for Magnetic Resonance Imaging, will utilize captive birds. Subjects from the latter two species are already available. Most of the captive emperor penguins would be considered geriatric and at risk for anesthesia, therefore emperor penguins will be exported as chicks, and then raised and maintained for the study. The export of 10 chicks will have no impact on the Cape Washington colony as emperor penguin chick censuses between 1983 and 2005 have been as high as 24,000 chicks.

Given (a) the significance of the volume of the air sacs and lungs in determination of the magnitude and distribution of total body O₂ stores, (b) the lack of verification of indirect estimates of diving air volume in penguins, (c) the possibility of air exhalation during many dives of penguins, and (d) the limited data used to construct allometric equations to predict air sac/lung volume on the basis of body mass, it is imperative to obtain direct measures of air sac and lung volumes in emperor penguins, king penguins, and Adélie penguins. Such direct measurements would provide the maximum available respiratory volume for O₂ store calculations and allow better evaluation and interpretation of data obtained with indirect techniques at sea for the three species. This is especially important for emperor penguins, as it is the species in which the most detailed diving physiology studies are available.

Location

Cape Washington, Terra Nova Bay, Victoria Land.

Dates

September 1, 2011 to December 31, 2012.

Suzanne H. Plimpton,*Management Analyst, National Science Foundation.*

[FR Doc. 2011-8737 Filed 4-12-11; 8:45 am]

BILLING CODE 7555-01-P**NATIONAL SCIENCE FOUNDATION****Notice of Permit Applications Received Under the Antarctic Conservation Act****AGENCY:** National Science Foundation.**ACTION:** Notice of permit applications received under the Antarctic Conservation Act of 1978, Public Law 95-541.**SUMMARY:** The National Science Foundation (NSF) is required to give public notice of permit applications received to conduct activities regulated under the Antarctic Conservation Act of 1978. NSF has published regulations under the Antarctic Conservation Act at Title 45 part 670 of the Code of Federal Regulations. This is the required notice of permit applications received.**DATES:** Interested parties are invited to submit written data, comments, or views with respect to this permit application by May 13, 2011. This application may be inspected by interested parties at the Permit Office, address below.**ADDRESSES:** Comments should be addressed to Permit Office, Room 755, Office of Polar Programs, National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230.**FOR FURTHER INFORMATION CONTACT:** Nadene G. Kennedy at the above address or (703) 292-7405.**SUPPLEMENTARY INFORMATION:** The National Science Foundation, as directed by the Antarctic Conservation Act of 1978 (Pub. L. 95-541), as amended by the Antarctic Science, Tourism and Conservation Act of 1996, has developed regulations for the establishment of a permit system for various activities in Antarctica and designation of certain animals and certain geographic areas as requiring special protection. The regulations establish such a permit system to designate Antarctic Specially Protected Areas.

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Given (a) the significance of the volume of the air sacs and lungs in determination of the magnitude and distribution of total body O₂ stores, (b) the lack of verification of indirect estimates of diving air volume in penguins, (c) the possibility of air exhalation during many dives of penguins, and d) the limited data used to construct allometric equations to predict air sac/lung volume on the basis of body mass, it is imperative to obtain direct measures of air sac and lung volumes in emperor penguins, king

penguins, and Adélie penguins. Such direct measurements would provide the maximum available respiratory volume for O₂ store calculations and allow better evaluation and interpretation of data obtained with indirect techniques at sea for the three species. This is especially important for emperor penguins, as it is the species in which the most detailed diving physiology studies are available.

Location

Cape Washington, Terra Nova Bay, Victoria Land.

Dates

September 1, 2011 to December 31, 2012.

Nadene G. Kennedy,

Permit Officer, Office of Polar Programs.

[FR Doc. 2011-8772 Filed 4-12-11; 8:45 am]

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NUCLEAR REGULATORY COMMISSION

[Docket No. 72-72; NRC-2011-0079; EA-11-039]

In the Matter of Indiana Michigan Power Company; DC Cook Nuclear Plant Independent Spent Fuel Installation; Order Modifying License (Effective Immediately)

AGENCY: Nuclear Regulatory Commission.

ACTION: Issuance of Order for Implementation of Additional Security Measures and Fingerprinting for Unescorted Access to Indiana Michigan Power Company.

FOR FURTHER INFORMATION CONTACT: L. Raynard Wharton, Senior Project Manager, Licensing and Inspection Directorate, Division of Spent Fuel Storage and Transportation, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission (NRC), Rockville, MD 20852. Telephone: 301-492-3316; fax number: 301-492-3348; e-mail: Raynard.Wharton@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction

Pursuant to 10 CFR 2.106, the NRC (or the Commission) is providing notice, in the matter of DC Cook Nuclear Plant Independent Spent Fuel Storage Installation (ISFSI) Order Modifying License (Effective Immediately).

II. Further Information

I

NRC has issued a general license to Indiana Michigan Power Company (I&M), authorizing the operation of an ISFSI, in accordance with the Atomic Energy Act of 1954, as amended, and Title 10 of the Code of Federal Regulations (10 CFR) part 72. This Order is being issued to I&M because it has identified near-term plans to store spent fuel in an ISFSI under the general license provisions of 10 CFR part 72. The Commission's regulations at 10 CFR 72.212(b)(5), 10 CFR 50.54(p)(1), and 10 CFR 73.55(c)(5) require licensees to maintain safeguards contingency plan procedures to respond to threats of radiological sabotage and to protect the spent fuel against the threat of radiological sabotage, in accordance with 10 CFR part 73, Appendix C. Specific physical security requirements are contained in 10 CFR 73.51 or 73.55, as applicable.

Inasmuch as an insider has an opportunity equal to, or greater than, any other person, to commit radiological sabotage, the Commission has determined these measures to be prudent. Comparable Orders have been issued to all licensees that currently store spent fuel or have identified near-term plans to store spent fuel in an ISFSI.

II

On September 11, 2001, terrorists simultaneously attacked targets in New York, NY, and Washington, DC, using large commercial aircraft as weapons. In response to the attacks and intelligence information subsequently obtained, the Commission issued a number of Safeguards and Threat Advisories to its licensees to strengthen licensees' capabilities and readiness to respond to a potential attack on a nuclear facility. On October 16, 2002, the Commission issued Orders to the licensees of operating ISFSIs, to place the actions taken in response to the Advisories into the established regulatory framework and to implement additional security enhancements that emerged from NRC's ongoing comprehensive review. The Commission has also communicated with other Federal, State, and local government agencies and industry representatives to discuss and evaluate the current threat environment in order to assess the adequacy of security measures at licensed facilities. In addition, the Commission has conducted a comprehensive review of its safeguards and security programs and requirements.