	Technical Standards and Safety Authority INSPECTION PROCEDURE	March 20, 2008
	Procedure for Testing Nudging	Rev. 1

There is no reference in the ASME A17.1/CSA B44 or the A17.2 Inspection Guide to the term referred to as "nudging" and it is not defined. The exception is where it is located in the index pointing to 2.13.5. This is the requirement for door reopening devices that can be affected by gas or smoke to be rendered inoperative after being obstructed for more than 20 seconds (ref. B44-04 2.13.5.4). When the door reopening device is rendered inoperative the closing kinetic energy shall not exceed 3.5 J (CSA B44 2.13.4.2.1 (c) (2)) and is achieved by reduced closing speed measured in time. The reduced closing time is provided by the person or firm installing or maintaining the device.

Reference to the procedure for verifying compliance is clearly communicated in Directors Order (Ruling) 103/93 revised January 5, 1995.

Checking for Conformance with Safety Code Required

a)   Verify that the elevator door reopening devices that may be affected by smoke or hot gases (e.g. photoelectric devices.,..) are rendered inoperative after the door has been held open (*3) for 20 seconds by such a device (*1), where the normal car operation is in effect, and

b)   If the smoke/gases sensitive device is the sole (*2) door reopening device, verify that, after the device becomes inoperative, the door closing kinetic energy is reduced to 3.5J or less, and

c)   If the elevator is equipped with manual or automatic recall operation in addition to a) and b) verify that:

   c1)   Any reopening device that may be affected by smoke or hot gases is rendered inoperative as soon as the recall operation is initiated; and

   c2)   The kinetic energy of closing door is reduced as in b) if such device is the sole reopening device.

Notes:

*1   A paper sheet or a tape may be used to simulate smoke. (*4)

*2   If the door is equipped with two devices, one of which is not smoke/gases sensitive, the kinetic energy need not be reduced.

*3   The 20 seconds interval should commence from the moment the door-operator would normally receive a start-door-closing command. The command may come from a pre-programmed automatic dispatching system or from a car or a landing call.
To verify the 20 seconds limit when the door-closing is initiated by an automatic dispatcher, one must first establish the pre-programmed-door-open interval. For that purpose one would (a) call the car to a landing, (b) ensure that no further car or landing call is registered and (c) count the time, e.g. xyz seconds, that the doors remain open. The test should then be repeated with a smoke simulating- obstruction placed in the door path (see note *2). The doors should close automatically against the obstruction not later than xyz + 20 seconds.
Note: The time referred to as "xyz" may also be referred to as dwell time.

*4   If the paper sheet or tape is removed before the door is fully closed, the door may reopen or continue to nudge closed.