



Legal Metrology Branch
Standards Building
Holland Avenue
Ottawa, Ontario
K1A 0C9

SPG-264

SPECIAL APPROVAL

66635-N376

April 29, 1981

Granted to: Nova, an Alberta Corporation,
P. O. Box 2330,
Edmonton, Alberta.
T5J 2R1

Attention: Mr. B. J. McConaghy,
Technical Supervisor,
Measurement Department.

Subject: Changes to Atmospheric Pressure in the Existing Base Pressure Indexes

Special Approval is hereby granted by the Legal Metrology Branch to Nova, an Alberta Corporation, to change atmospheric pressure levels for the Base Pressure Indexes at present in service, from the values used at the time the BPIs were last verified, to the new atmospheric pressures corresponding to the actual elevations of the BPIs in service.

Approximate number of the devices owned by Nova Corporation in service at present in Calgary and Edmonton Districts are as follows:

<u>Calgary District</u>	<u>Edmonton District</u>
167 Canadian Meter Co.	109 Canadian Meter Co.
117 Mercury Instruments	146 Mercury Instruments

Some of these devices will have the atmospheric pressures marked on their nameplates which already correspond to the actual elevation of service location of the BPIs, and these devices will not be subject to any change and their legal status in service would not be affected.

The devices affected by this approval fall into three categories, described below:

1. Change of Atmospheric Pressure Without Need for Re-calibration of the Device

Where the atmospheric pressure requires to be changed in order that it will correspond to the true elevation of the devices in service but the level of change will not cause the devices to perform outside the tolerance of $\pm 2\%$, as required by the Departmental Instructions, Part VIB, Nova Corporation shall proceed in the following manner:

- (i) At least two weeks before the change is to take place, notify the District Manager of the change and provide him with a listing giving the following information:
 - (a) Make and serial number of each device.
 - (b) Inspection number and year of verification.
 - (c) Marked atmospheric pressure.
 - (d) Proposed new atmospheric pressure.
 - (e) Location of the device.
 - (f) Elevation above sea level of the location.
 - (g) Pressure range of the device.
 - (h) Base pressure used.
- (ii) The District Manager may arrange, at his option, for inspection of any of the devices during the change or any time thereafter.
- (iii) Nova Corporation will have the old atmospheric pressure crossed out on the existing plate and will attach, using its seal, a metal tag with the new atmospheric pressure stamped on it in Imperial units. When the device is inspected, the utility's seal holding the metal tag to the device shall be replaced by the government seal.
- (iv) Nova Corporation shall notify its customers of the change of atmospheric pressure.

2. Change of Atmospheric Pressure with Recalibration of the Device

Where the change of atmospheric pressure requires only re-calibration of the device to bring its performance within acceptable tolerance of $\pm 2\%$, Nova Corporation shall proceed as follows:

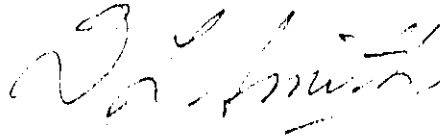
- (i) Send a notification to the District Manager, with information as in paragraph 1 (i) above.
- (ii) Arrange for its customer to witness the in situ re-calibration, which shall meet the requirements of the Departmental Instructions.
- (iii) The District Manager may arrange, at his option, for a government inspector to witness the re-calibration or for him to perform a complete re-verification of any or all of these devices, at a time mutually suitable to the District Manager and Nova Corporation.
- (iv) Where the government inspector is not present at the time of the re-calibration of the device, Nova Corporation shall send to the District Manager complete results of the calibration, indicating the standards of comparison used and their traceability to the Departmental standards.
- (v) The change in marking of the atmospheric pressure shall be effected as stipulated in paragraph 1 (iii) above.

3. Change of Atmospheric Pressure Requiring Modification to the Device

Where, as a result of the change of atmospheric pressure for a device, required adjustments alone could not secure proper operation of the device, such devices shall be withdrawn from service by Nova Corporation and a listing of all such devices shall be supplied to the District Manager with the information stipulated in paragraph 1 (i) above.

Nova Corporation is authorized to introduce, in its shop, such changes to these devices, usually replacement of the pressure scale and/or integrating drum assembly, so as to ensure satisfactory performance of the device with the new atmospheric pressure. Following completion of these changes, each device shall be submitted for

verification by a government inspector and, if accepted, shall be sealed in accordance with the provisions in the Technical Gas Circular G-80-1. In addition, the inspector shall also attach the metal tag, with the new atmospheric pressure stamped on it, to each verified device using the government seal. The old atmospheric pressure shall be crossed out from the nameplate data.



D. L. Smith, P. Eng.,
Chief,
Electricity and Gas Division.

cc: Mr. G. Poissant
Nova (Edmonton),
Mr. L. Hewitt (Calgary)
Mr. F. W. Nash (Edmonton)