

***DEALING WITH GAS SUPPLY
DISRUPTION IN ITALY DURING WINTER
2005-2006 AND AFTERMATHS***

by Sergio F. Garribba

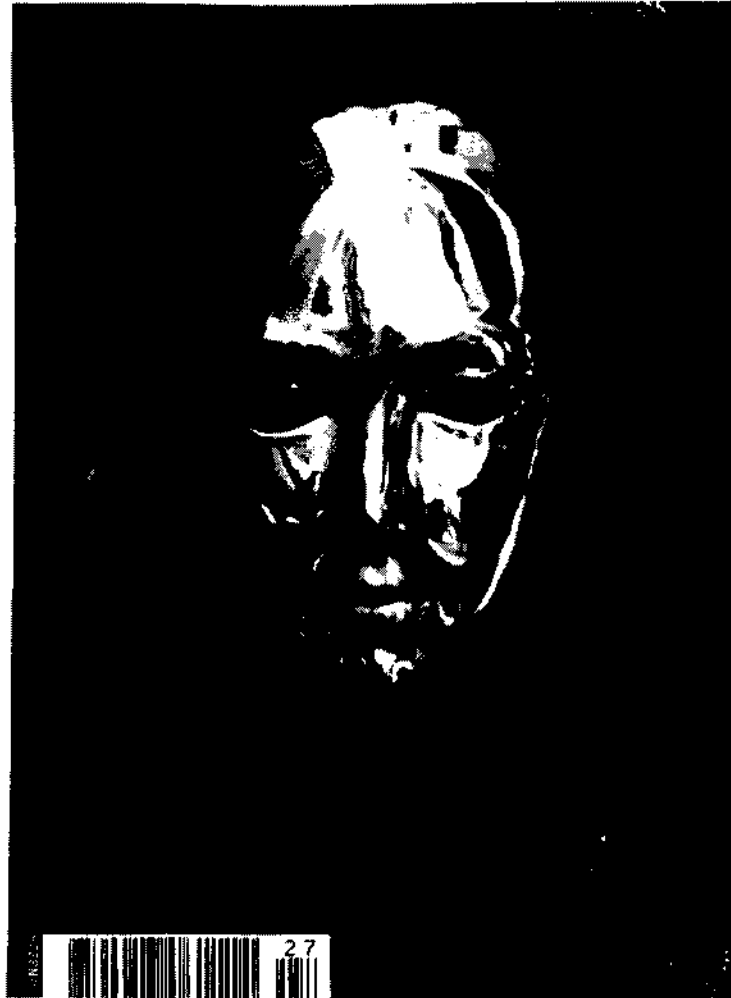
**The Director General of Energy and Mineral Resources
Ministry of Economic Development**

***IEA Gas Security Workshop
Paris, June 12, 2006***

SUBJECTS

- **The framework**
- **Dealing with Winter 2005-2006
disruption**
- **Lessons learned**

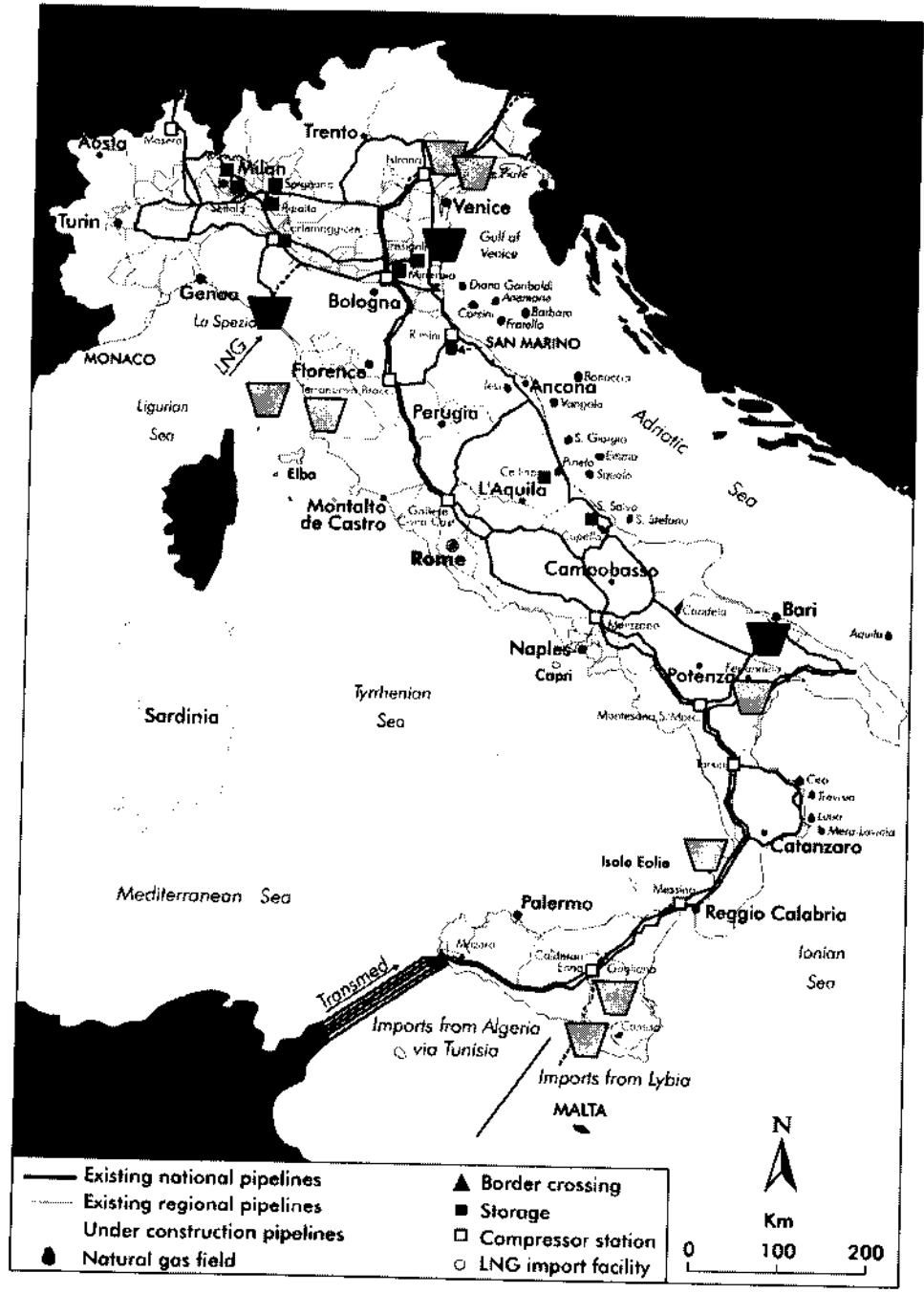
Italy



1. NATIONAL GAS SUPPLY

LNG TERMININALS

- ▼ Operating
- ▾ Authorised
- ▤ Proposed



Underground gas storages



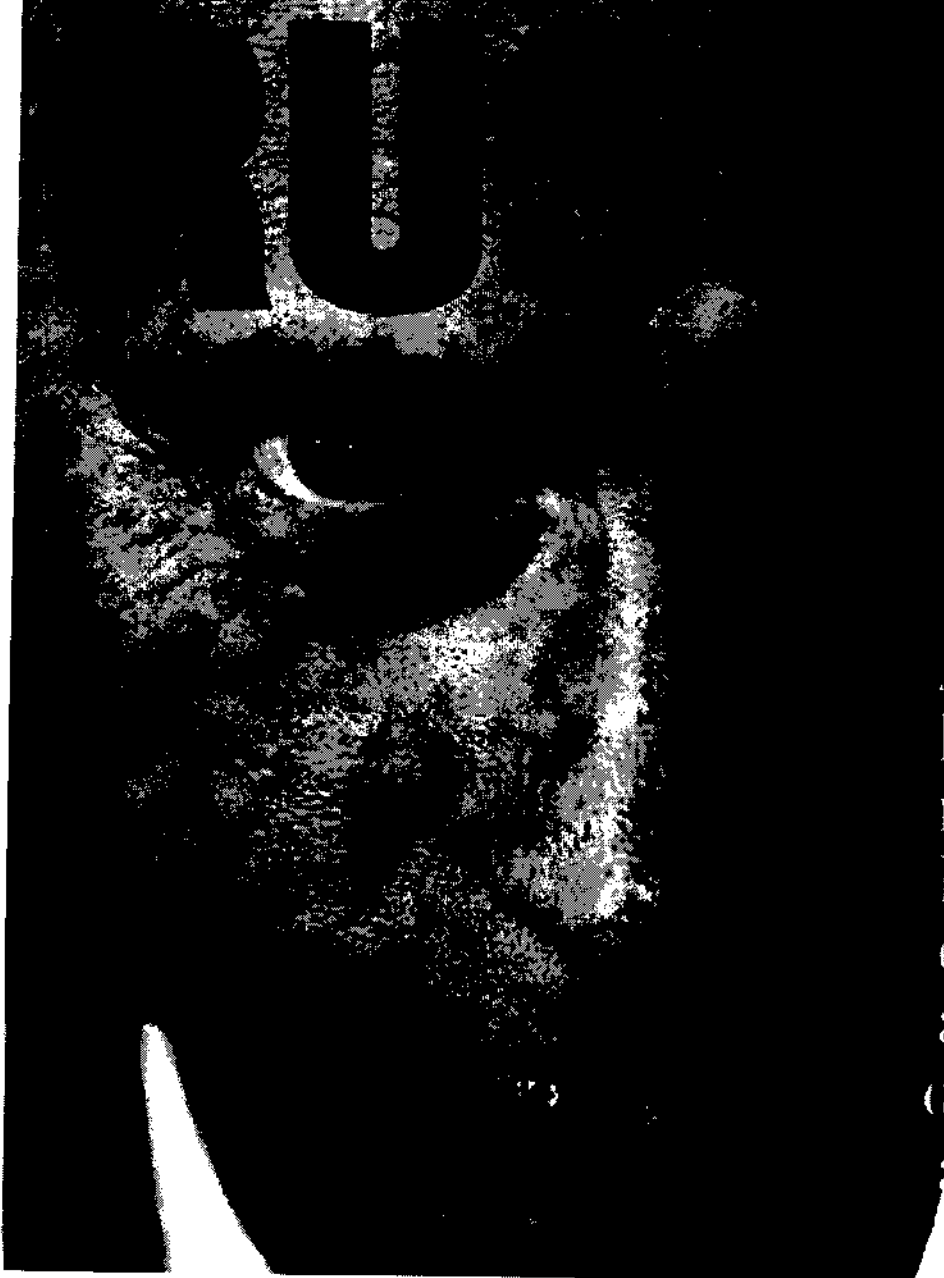
2. NATIONAL GAS BALANCE – WINTER 2005 - 2006

- **Winter peak** vs **Summer low**
350-440 mcm/d vs **200-250mcm/d**
- **National gas demand** **53 bcm**
(November 2005 – March 2006)
- **Commercial gas storage capacity** **8.1 bcm**
Strategic gas storage capacity **5.1 bcm**
- **Maximum daily draw from storage** **160 mcm/d**
- **Remaining strategic storage** **3.9 bcm**
on March 22, 2006

3. STRUCTURE OF GAS MARKET IN ITALY

- **All customers eligible since January 1, 2002**
- **Separated companies, regulated tpa and tariffs for gas transport, distribution, storage, lng**
- **20% tpa – 80% negotiated access for new gas infrastructure during a 20 – year period**
- **Competitive pricing for gas supply, trading, metering, retail**
- **Virtual trading hub, long – term take – or – pay contracts, most of entry points into Italy controlled by one company**
- **Liberalised electricity market (50% gas dependent)**

VLADIMIR PUTIN'S



At an historic moment, Russia is emerging as a key oil power.

4. THE WINTER 2005-2006 SUPPLY TIGHTNESS

- **High gas demand for heating
(400,000 customers added since 2004)**
**unexpected cold winter
(the coldest since 22 years)**
- **New gas demand for electricity
(8,000 MW added since 2004)**
**market change
in power generation**
- **Reduced supply from Russia
(- 5 / - 10 mcm/d January 2006)**
**disruptions
along the
Brotherhood Gas
Pipeline**

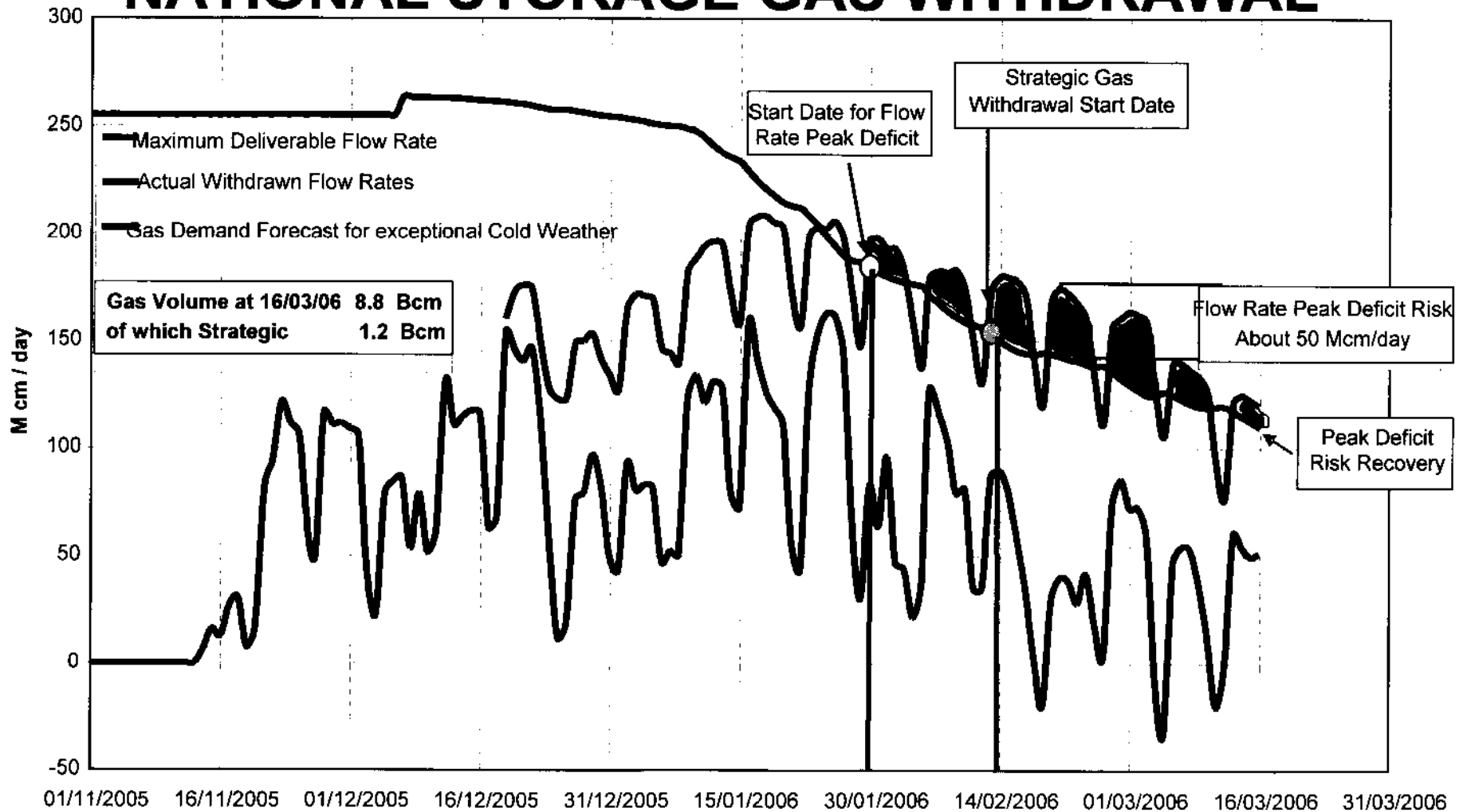
5. GUIDING CRITERIA OF THE GAS EMERGENCY PLAN

- Exploit market mechanisms while avoiding undue interferences**
- Minimise volume draw on stocks**
- Maximise capacity to respond to peak demand**
- Development of new gas infrastructure in the longer term**

6. ADOPTION OF REACTIVE EMERGENCY PLAN – WINTER 2005-2006

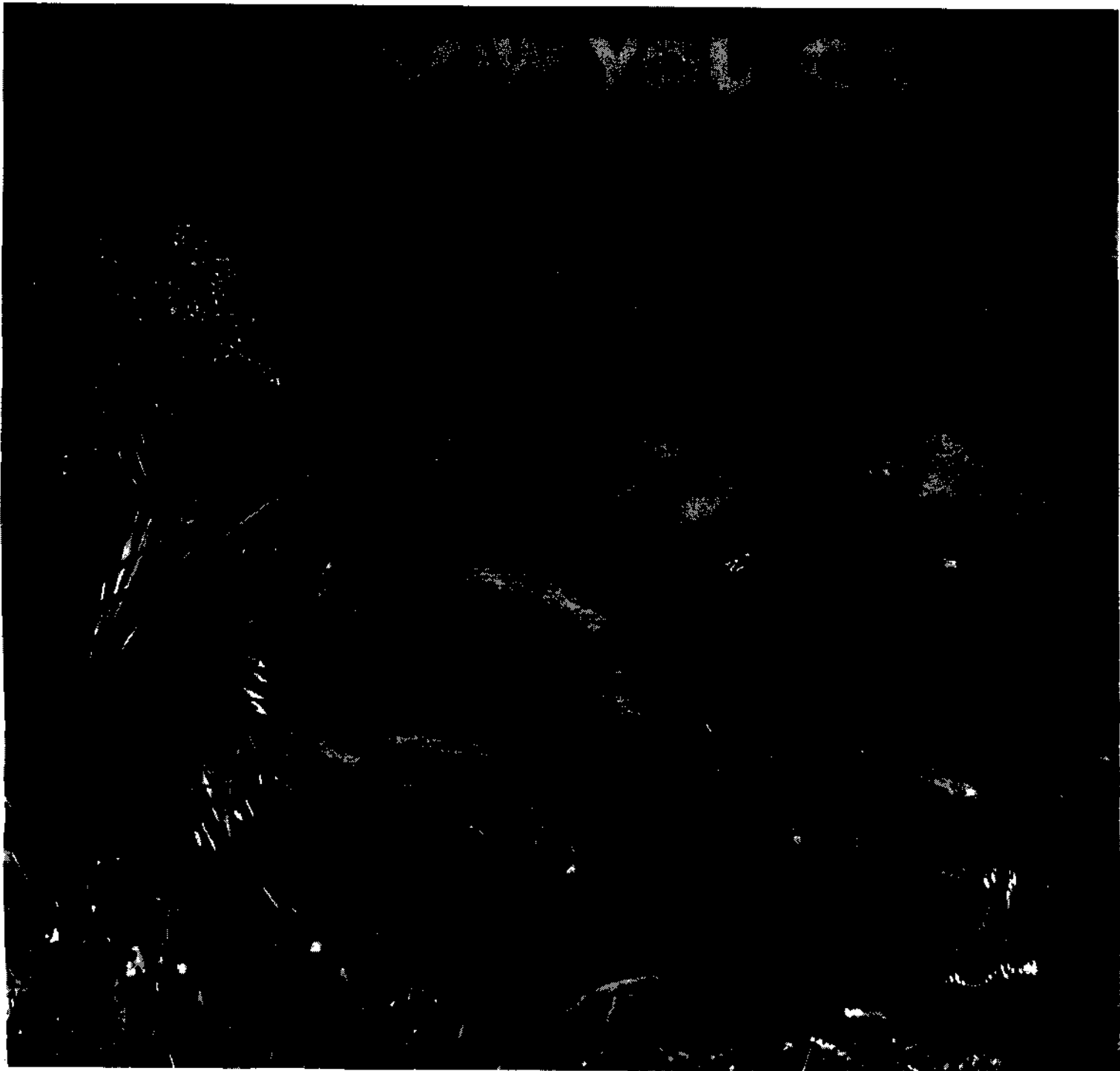
- **Activation of the emergency plan (December 22, 2005) including measures to be adopted in a sequence**
- **Use of commercial (and strategic) storage**
- **Maximisation of gas imports and domestic production**
- **Use of interruptible contracts**
- **National campaign for gas-saving**
- **Lower temperature and time limits for residential and commercial heating**
- **Shift to fuel oil in power generation (with priority dispatching) and in industry**

NATIONAL STORAGE GAS WITHDRAWAL



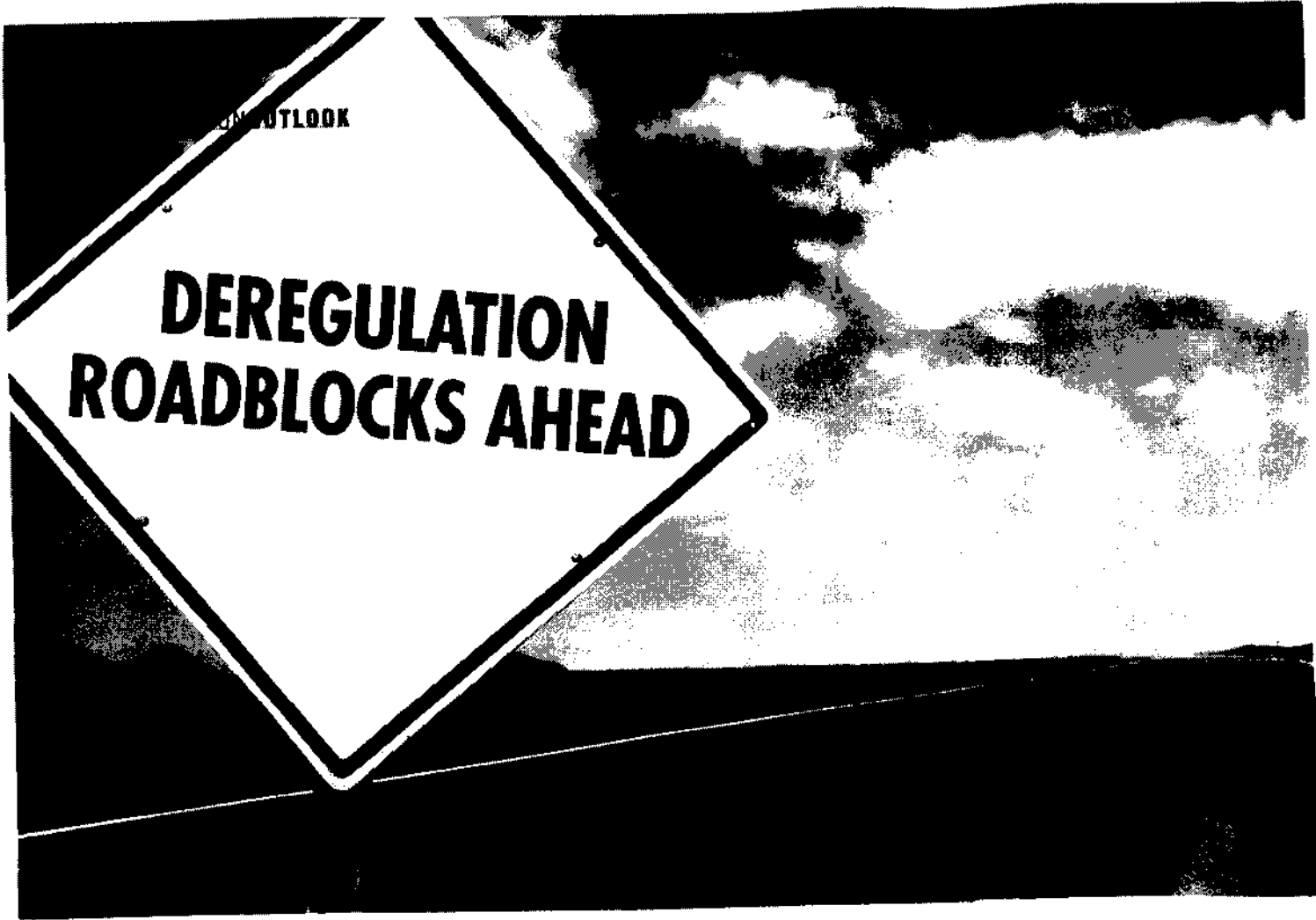
7. CRISIS MANAGEMENT SHOULD EMERGENCY PROCEDURE FAIL TO COPE WITH GAS PEAK DEMAND

- **Reduced operating pressure in the gas transport system**
- **Mandatory cut-off of major gas industry users**
- **Mandatory electricity imports to displace national gas – fired generation**



OUTLOOK

**DEREGULATION
ROADBLOCKS AHEAD**



8. PREPARATION OF PROACTIVE EMERGENCY PLAN – WINTER 2006-2007

- **Early maximisation of gas imports**
- **New temperature and time limits for residential and commercial heating during the entire Winter period**
- **Early shift to fuel oil in power generation**
- **Price surcharge for gas demand by power plants**

9. DEVELOPMENT OF NEW GAS INFRASTRUCTURE

- **New interconnectors (from Greece, Algeria) and upgrading of existing interconnectors (TAG, TRANSMED)**
- **New gas storage facilities and upgrading of existing storage capacity**
- **Construction of lng terminals**

10. LESSONS LEARNED AND CONCLUSIONS

- **Proactive and reactive emergency plans to cope with unexpected events**
- **Incentive regulation to ensure timely investment in new gas infrastructure**
- **Government and national regulator to promote diversification of gas suppliers, of gas supply routes while accelerating transboundary grid integration**
- **Increased interaction between electricity and gas market asking for co – ordinated development and regulation**



YOU SEE A

Questions?

