Representation against premature retirement are considered in accordance with the procedure prescribed therefor as and when they are received.

### ENERGY GENERATION FROM SOLAR HEAT AND WIND

- 235. SHRI BHAIRAB CHANDRA MAHANTI: Will the Minister of ENERGY be pleated to state:
- (») whether Government have examined the potential of energy generation from solar heat and wind with a view to augmenting the sources of energy supply; and
- sources of energy supply; and (b) *it* so, what are the details in this regard?

# THE MINISTER OF ENERGY (SHRI F. RAMACHANDRAN) : (a) Yea, Sir.

- (b) Solar energy offers considerable potential under conditions obtaining in our country and research and developmental activities in this field have been given very high priority. An integrated research sre-grjunme has been formulated to develop the technology of application of solar energy for various purposes. The research activities are directed towards developing: (i) thermal uses of solar energy and (ii) conversion of solar energy into electricity. The thermal use of solar energy requires the collection of solar energy through the use of collectors and the use of this heat energy either directly or by converting it into mechanical energy. Considerable progress has been made in developing flat plate collectors which enable solar energy to be utilised at low and medium temperature\*. Work is now in progress on improving the collector systems by evolving appropriate selective coatings. Priority hat been laid down for the end use of solar energy as follows:
  - (i) Pumping for irrigation purposes;
  - (ii) drying of agricultural products;
  - (iii) cooling for food preservation;
  - (iv) desalination of salt and brackish water;
  - (v) water heating and space heating: and
  - (vi) air-conditioning.

As yet, the only item which is near commercial viability is that for water and space heating. A pilot project for generating electricity, using solar energy collected through flat plate collectors, has been taken up and is expected to be commissoi-ed by the end of 1977. Work is being done on developing solar cells for direct conversion of solar energy into electricity. While technical viability has been established, greater efforts are required to improve the economic viability of this process.

to Questions

The potential for utilisation of wind energy in our country is limited as wind velocities in most parts of our country are low and winds are also not uniform. However, in certain areas like the tea cossta and the hills, it may be possible to use wind energy for pumping water and generating electricity. Research and development activities have been undertaken to develop prototype wind mills for this purpose.

#### SEPARATION OF NEWS AGENCIES MERGED TO-GETHER TO FORM 'SAMACHAR'

- 236. SHRI BHAIRAB CHANDRA MAHANTI: Will the Minister of INFORMATION AND BROADCASTING to pleased to state :
- (a) whether there is any proposal under Government's consideration to separate the news agencies which were merged together to form 'Samachar' and allow them to function independently; and
  - (b) if so, what are the details thereof?

THE MINISTER OF INFORMATION AND BROADCASTING (SHRI LAL K. ADVANI): (a) and (b) A Committee has been appointed to examine the functioning of Samachar and to make recommendations regarding its future set up. The report of the Committee is awaited.

## INDUSTRIAL LICENCES AND LETTERS OF INTENT ISSUED IN GUJARAT

237. PROF, RAMLAL PARIKH: Will the Minister of INDUSTRY be pleased to state the number of licences and letters of intent issued to the entrepreneurs in Gujarat for setting up new industrial units in the State during the last two years?

THE MINISTER OF INDUSTRY (SHRI BRIJ LAL VERMA): 53 licences and 103 letters of intent were issued to the entrepreneurs under the Industries (Development and Regulation) Act for setting up new industrial units in the State of Gujarat during the last two years, 1975 and 1976.

#### POWER GENERATION FROM SEA WAVES

238. PROF. RAMLAL PARIKH: Will the Minister of ENERGY be pleased to state:

- (a) whether Government have examined the possibility of generating electricity from the sea waves on the coastal areas of Gujarat; and
- (b) if so, what are the details in this regard

THE MINISTER OF ENERGY (SHRI P. RAMACHANDRAN) : (a) and (b) The Government have not examined possibility of generating electricity from the sea waves on the coast of Gujarat. However, the possibility of producing electricity from the tides has been examined. Tidal power generation is possible in the gulfs of Kutch and Gujarat. Preliminary Cambay in investigations and studies carried out indicate large theoretical potential for power generation at both these locations. Development potential would require further detailed investigation and studies, to establish the technical feasibility and economic viability of the schemes. Power output from tidal schemes is by nature fluctuating and firming up of such power and absorbing it in the system pose complex problems. The rough costs worked out, based on preliminary investigations and studies carried out so far, indicate that the economics of tidal power is not favourable at present in our country. The matter requires further investigations and studies.

### गांधी जी के साहित्य का प्रकाशन

- 239. ढा० रामकृपाल सिंह : क्या सुचना श्रीर प्रसारण मंत्री यह बताने की कुपा करेंगे
- (क) क्या संपूर्ण गांधी बाङ्मय के लिए श्री मोरारजी देसाई की ग्रध्यक्षता में बनाए गए सलाहकार बोर्ड को हाल की श्रापात स्थिति के दौरान भंग कर दिया गमा
- (ख) यदि हां, तो नया बोर्ड के भंग किए जाने से गांधी वाङ्मय के प्रकाशन में बाधा पहुंची थी; ग्रौर
- (ग) क्या सरकार उक्त सलाहकार बोर्ड को फिर से स्थापित करने का विचार रखती 青?

#### PUBLICATION OF GANDHIJI'S WORKS

- 239. DR. RAMKRIPAL SINHA: Will the Minister of INFORMATION AND BROADCASTING be pleased to state:
- (a) whether the Advisory Board for the collected Works of Mahatma Gandhi headed by Shri Morarji Desai was dissolved during the recent emergency;
- (b) if so, whether its dissolution obstructed the publication of the Gandhiji's works;
- (c) whether Government propose to revive the said Advisory Board ?]

### सुचना और प्रसारण मंत्री (भी लाल करुण ग्राडवाणी: (क) जी, हां।

- (ख) जी नहीं।
- (ग) संपूर्ण गांधी वाङ्मय का सलाहकार बोर्ड मई, 1977 में फिर से स्थापित किया जाचुका है।
  - t[ ] English translation.