GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
RAJYA SABHA
STARRED QUESTION NO.*49
TO BE ANSWERED ON 02.12.2021

POWER GENERATION CAPACITY OF NPCIL

49. Shri K.R.N. Rajeshkumar:

Will the PRIME MINISTER be pleased to state:

(a) the details of electricity being generated in the Nuclear Power Corporation of India Limited (NPCIL) units of Kudankulam and Kalpakkam in Tamil Nadu during the last three years, year-wise details thereof;

(b) the details of units distributed to the State of Tamil Nadu by Government during the last three years;

(c) the percentage of share of the State Government of Tamil Nadu and the Union Government in this distribution;

(d) whether the State Government of Tamil Nadu has requested for more allocation; and

(e) if so, action taken by Government on this request?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (DR.JITENDRA SINGH):

(a)to(e) A statement is laid on the Table of the House.

******

Government of India
Department of Atomic Energy

STATEMENT REFERRED TO IN REPLY TO RAJYA SABHA STARRED QUESTION NO. *49 FOR ANSWER ON 02.12.2021 BY SHRI K.R.N. RAJESHKUMAR REGARDING POWER GENERATION CAPACITY OF NPCIL

(a) The year-wise details of electricity being generated in the Nuclear Power Corporation of India Limited (NPCIL) Units of Kudankulam and Kalpakkam in Tamil Nadu during last three years, is given below:

Energy Generated (Ex Bus) in Million Units (MU)			
Year	**KudankulamUnit-1**	**Kudankulam Unit-2**	**MAPS, Kalpakkam**
2018-19	2468.48	2930.40	1118.51
2019-20	6575.17	3573.32	1451.99
2020-21	5157.76	5861.44	1348.66
2021-22 pril to October,2021)	3081.85	3991.45	326.23

(b) The details of units distributed to Tamil Nadu by Government from the generating units of NPCIL located in Tamil Nadu, during the last three years are as under**:**

Energy Distributed to Tamil Nadu in Million Units (MU)			
Year	**KudankulamUnit-1**	**Kudankulam Unit-2**	**MAPS, Kalpakkam**
2018-19	1541.73	1715.48	870.25
2019-20	3886.53	2040.99	1085.45
2020-21	3097.02	3331.75	1021.76
2021-22 (April to October,2021)	1838.15	2263.13	237.81

(c) :The percentage share of Tamil Nadu Government and the Union Government in the distributionof electricity to Tamil Nadu (TN) from the generating units of NPCIL at Kudankulam and Kalpakkam(located in Tamil Nadu),during last three years is given below:

Percentage (%) Share						
Year	**KudankulamUnit-1**		**Kudankulam Unit-2**		**MAPS, Kalpakkam**	
	Firm Share of TN	**Share of TN from Unallocated Quota ***	**Firm Share of TN**	**Share of TN from Unallocated Quota ***	**Firm Share of TN**	**Share of TN from Unallocated Quota***
2018-19	46.25	12.67	46.25	10.00	74.32	0.73
2019-20	46.25	12.68	46.25	10.00	74.32	0.74
2020-21	46.25	12.65	46.25	10.00	74.32	0.88
2021-22 (April to October,2021)	46.25	12.65	46.25	10.00	74.32	0.88

*** Allocation of unallocated power by the Union Government.**

(d) No, Sir.

(e) Does not arise in view of (d) above.

******

भारत सरकार

परमाणु ऊर्जा विभाग

राज्य सभा

तारांकित प्रश्न संख्या *49

जिसका उत्तर दिनांक 02.12.2021 को दिया जाना है

एनपीसीआईएल की विद्युत उत्पादन क्षमता

49. श्री के. आर. एन. राजेश कुमार :

क्या प्रधान मंत्री यह बताने की कृपा करेंगे कि :

(क) न्यूक्लियर पावर कॉरपोरेशन ऑफ इंडिया लिमिटेड (एनपीसीआईएल) की तमिलनाडु के कुडनकुलम और कल्पक्कम में स्थित इकाइयों द्वारा विगत तीन वर्षों के दौरान उत्पादित विद्युत का वर्ष-वार ब्यौरा क्या है;

(ख) सरकार द्वारा विगत तीन वर्षों के दौरान तमिलनाडु राज्य को कितने यूनिट विद्युत का संवितरण किया गया;

(ग) इस संवितरण में तमिलनाडु सरकार और केन्द्रीय सरकार की कितने-कितने प्रतिशत हिस्सेदारी है;

(घ) क्या तमिलनाडु सरकार ने और अधिक विद्युत आवंटन किए जाने का अनुरोध किया है; और

(ङ) यदि हाँ, तो इस अनुरोध पर सरकार द्वारा क्या कार्रवाई की गई है ?

उत्तर

राज्य मंत्री, कार्मिक, लोक शिकायत और पेंशन तथा प्रधान मंत्री कार्यालय (डॉ. जितेन्द्र सिंह) :

(क) से (ङ) सदन के पटल पर विवरण प्रस्तुत है ।

******

भारत सरकार

परमाणु ऊर्जा विभाग

"एनपीसीआईएल की विद्युत उत्पादन क्षमता" के संबंध में श्री के. आर. एन. राजेश कुमार द्वारा पूछे गए राज्य सभा तारांकित प्रश्न संख्या *49, जिसका उत्तर दिनांक 02.12.2021 को दिया जाना है, के उत्तर में संदर्भित विवरण ।

(क) पिछले तीन वर्षों के दौरान तमिलनाडु में न्यूक्लियर पावर कॉरपोरेशन ऑफ इंडिया लिमिटेड (एनपीसीआईएल) की कुडनकुलम और कल्पाक्कम में स्थित यूनिटों में उत्पादित की जा रही बिजली का वर्ष-वार विवरण निम्नलिखित है :

मिलियन यूनिटों (एमयू) में उत्पादित (एक्स बस) ऊर्जा			
वर्ष	**कुडनकुलम यूनिट-1**	**कुडनकुलम यूनिट-2**	**एमएपीएस, कल्पाक्कम**
2018-19	2468.48	2930.40	1118.51
2019-20	6575.17	3573.32	1451.99
2020-21	5157.76	5861.44	1348.66
2021-22 (अप्रैल से अक्टूबर, 2021)	3081.85	3991.45	326.23

(ख) पिछले तीन वर्षों के दौरान तमिलनाडु में स्थित एनपीसीआईएल की उत्पादन यूनिटों से सरकार द्वारा तमिलनाडु को वितरित यूनिटों का विवरण निम्नलिखित है :

मिलियन यूनिटों (एमयू) में तमिलनाडु को वितरित ऊर्जा			
वर्ष	**कुडनकुलम यूनिट-1**	**कुडनकुलम यूनिट-2**	**एमएपीएस, कल्पाक्कम**
2018-19	1541.73	1715.48	870.25
2019-20	3886.53	2040.99	1085.45
2020-21	3097.02	3331.75	1021.76
2021-22 (अप्रैल से अक्टूबर, 2021)	1838.15	2263.13	237.81

(ग) पिछले तीन वर्षों के दौरान कुडनकुलम और कल्पाक्कम (तमिलनाडु में स्थित) की एनपीसीआईएल की उत्पादन यूनिटों से तमिलनाडु (टीएन) को बिजली के वितरण में तमिलनाडु सरकार और संघ सरकार के हिस्से का प्रतिशत निम्नलिखित है :

प्रतिशत (%) हिस्सा						
वर्ष	**कुडनकुलम यूनिट-1**		**कुडनकुलम यूनिट-2**		**एमएपीएस, कल्पाक्कम**	
	टीएन का निश्चित हिस्सा	**अनाबंटित कोटा से टीएन का हिस्सा ***	**टीएन का निश्चित हिस्सा**	**अनाबंटित कोटा से टीएन का हिस्सा ***	**टीएन का निश्चित हिस्सा**	**अनाबंटित कोटा से टीएन का हिस्सा ***
2018-19	46.25	12.67	46.25	10.00	74.32	0.73
2019-20	46.25	12.68	46.25	10.00	74.32	0.74
2020-21	46.25	12.65	46.25	10.00	74.32	0.88
2021-22 (अप्रैल से अक्टूबर, 2021)	46.25	12.65	46.25	10.00	74.32	0.88

*** संघ सरकार द्वारा अनाबंटित विद्युत का आबंटन**

(घ) जी, नहीं ।

(ङ) उपरोक्त (घ) के मद्देनजर प्रश्न नहीं उठता ।

******

2

MR. DEPUTY CHAIRMAN: First supplementary.

SHRI K.R.N. RAJESHKUMAR: Respected Deputy Chairman Sir, I thank you for the opportunity given to raise this first question. In this moment, I would like to extend my thanks and gratitude to my beloved leader hon. Chief Minister of Tamil Nadu, Thalaivar Thalapathy and Annan Udayanithi for sending me to this Upper House.

The hon. Minister in a reply to the Lok Sabha Unstarred Question No.4668, ...*(Interruptions)*...dated 24th March, 2021 had stated that in respect ...*(Interruptions)*...of Kudankulam Project Units 3 & 4 which are expected to complete in 2023…Please. ...*(Interruptions)*... Sir, it is my first question. Please. ...*(Interruptions)*...

MR. DEPUTY CHAIRMAN: No. ...*(Interruptions)*... It is not a statement. No, I will not allow. ...*(Interruptions)*...

SHRI K.R.N. RAJESHKUMAR: And in respect of Kalpakkam PFBR Project which is expected to complete in 2022, out of the sanctioned cost of Rs.5,677 crores...*(Interruptions)*...

MR. DEPUTY CHAIRMAN: Please. No. You have to put the question, Mr. Rajeshkumar...*(Interruptions)*...

SHRI K.R.N. RAJESHKUMAR: Only Rs.70 crores have been allocated in 2020-21, which are very meagre in nature. Keeping in view ...*(Interruptions)*...

MR. DEPUTY CHAIRMAN: Please. ...*(Interruptions)*...No. thank you.
SHRI K.R.N. RAJESHKUMAR: I would like to know ...*(Interruptions)*...the reasons for such meager allocation. ...*(Interruptions)*...

MR. DEPUTY CHAIRMAN:...*(Interruptions)*... It is a question, no explanation. ...*(Interruptions)*...

DR. JITENDRA SINGH: Mr. Deputy Chairman, Sir, I appreciate the concern of the hon. Member, Thiru Rajeshkumar hailing from Tamil Nadu. He wants to learn about the status of Kudankkulam. ...*(Interruptions)*...

श्री उपसभापति: माननीय सदस्यगण, प्लीज़, आपस में बात मत कीजिए। **... (व्यवधान)...**

DR. JITENDRA SINGH: I am sure he will be delighted when I share with him that despite the Covid pandemic ...*(Interruptions)*...because of an extra impetus given by the hon. Prime Minister ...*(Interruptions)*...

MR. DEPUTY CHAIRMAN: It is Question Hour, I again request you, please go back to your seats. ...*(Interruptions)*...

DR. JITENDRA SINGH: Through the enhancement of economic revenue generation and setting up of new units of the reactor...*(Interruptions)*... the Kudankkulam plant has been progressively showing new constructions and increase in the generation. ...*(Interruptions)*...

श्री मो. नदीमुल हक: सर … (**व्यवधान**)… सर, हम सदन से वॉकआउट करते हैं। … (**व्यवधान**)…

†**جناب ندیم الحق :** سر، ---(مداخلت)--- سر، ہم سدن سے واک آؤٹ کرتے ہیں---(مداخلت)---

(At this stage some hon. Members left the Chamber)

DR. JITENDRA SINGH: Now as far as this question relating to the completion of third and fourth unit is concerned, he will be happy to know that when this Government came in 2014, towards the end of 2013, Kudankkulam first unit had just been established but it was during this Government under the guidance of hon. Prime Minster, Shri Modi that 2014 onwards the Unit one became functional and, later on, precisely on the 15th of October, 2016, within two years, the second unit also became functional. Then, just one year later, in 2017, the construction for the third unit started. And, after six months, the construction for the fourth unit has also started. All this has happened only in the last six, seven years. And, hopefully, in 2021, we plan to start the construction of Unit five and Unit six as well. So, in other words, within these two terms of the present Government, Kundankulam is going to have as many as six units whereas in the earlier term of the UPA Government, hardly, the first Unit was in the process of being established. And, not only that, earlier on, the demand from the hon. Member's Party often was that there was lack of power generation and they wanted the share of the State to be increased. But, I am glad to note that now there has no longer been any kind of demand of that nature which in itself is a testimony to the fact that the overall generation has increased and in 2017-18, if the generation registered were 38,336 mega units, this year ending 2020, despite Covid pandemic, it has been 46,472 mega units. In the Covid itself, we have increased the power generation by more than 4,000 mega units. Thank you.

MR. DEPUTY CHAIRMAN: Now, second supplementary; Rajeshkumar*ji*, please be brief.

SHRI K.R.N. RAJESHKUMAR: Okay, Sir. Sir, my question is: Has any compensation been paid to the land owners and any jobs given to the wards of those who have given their land for the Kundankulam Power Project and is there any pending amount to be paid to the land owners on this basis?

DR. JITENDRA SINGH: I appreciate the hon. Member's concern but the matter of fact is that not only the land compensation is being taken care of, even the other aspects of it are being taken care of. In fact, in spite of the Covid pandemic, the NPCIL which is looking after the Kundankulam Project, was taking care not only of its labourers and workers but also of the Covid victims around and it had arranged railway trains to transport back labourers who hailed from Bihar, from Tamil Nadu to Bihar, and immediately Rs.26 crore was donated by the NPCIL for the relief of Covid victims. This was in addition to the CSIR amount from the overall Department of Atomic Energy. So, I think due care is being taken and I appreciate the concern of the hon. Member who hails from there.

MR. DEPUTY CHAIRMAN: Now, Shri K.J. Alphons. ...*(Interruptions)*...

† Transliteration in Urdu script.

SHRI K.R.N. RAJESHKUMAR: Sir, I would like to ask one more question. ...*(Interruptions)*...

MR. DEPUTY CHAIRMAN: No, Rajeshkumar*ji*, you have the right to ask only two questions. You have already completed two questions. Wait for next time. ...*(Interruptions)*... Now, Shri K.J. Alphons. ...*(Interruptions)*...

SHRI JOHN BRITTAS: Sir, as you are not allowing... ...*(Interruptions)*... In protest, I am walking out... ...*(Interruptions)*...

(At this stage, the hon. Member left the Chamber)

SHRI K.J. ALPHONS: Mr. Deputy Chairman, Sir, the fact that the Government has done fantastically well in the power sector and in the light of the fact that there have been accidents in nuclear power plants globally, nuclear power plants are being phased out, I would like to know what exactly the policy of the Government is? Are we going to set up more nuclear power plants because we have done very well in renewable energy and that has been the big focus? By 2030, I think close to 50 per cent of our power generation is going to come from renewable energy. Sir, are we going to really put up more nuclear power plants and what really are the safety valves**?** If they are going to do that, what are the safety measures that are being taken?

DR. JITENDRA SINGH: Mr. Deputy Chairman, Sir, I am glad that hon. Member has put this question because this gives me an opportunity to share with the august House that it was during the tenure of this Government, with the direct intervention of the hon. Prime Minister, a bulk approval of 10 indigenous reactors was done in a single Cabinet decision, which is a record in itself which had never happened in the history of Independent India. Not only that, in order to promote the setting up of new projects and to overcome the financial constraints that are faced in such situations, the Prime Minister took an out of box decision of allowing the Atomic Energy Department to enter into joint ventures which was never happening before and the insurance pool has also been increased. And, therefore, this is certainly going to lead to increased number of projects, and not only in the terms of the number of projects as the hon. Member has rightly pointed out which of course, I can give the figures also. By 2024, we will have 9 nuclear reactors plus 12 new additional which were approved during the Covid time with the capacity of 9,000 mega watts.

Sir, five new sites have also been identified. What is remarkable is that earlier all these nuclear plants were limited to a few States, a handful of States, like Andhra Pradesh, Tamil Nadu, etc., but, now, we have moved northwards also. We are going to have a nuclear project, first of its kind, in North India just about 150 kilometres from the place where we are sitting right now. It is a small township called Gorakhpur in Haryana. So, we have not only increased the number of plants, but, we are trying to make it a pan India generation project also.

DR. C.M. RAMESH: Sir, what is the per unit cost of generation of nuclear energy in comparison to other energies, like solar energy, thermal energy? Is it cheaper or is it costly? Also, what is the CAPEX cost for megawatt?

DR. JITENDRA SINGH: Sir, this is a question of common concern. All of us would appreciate that in the times to come, nuclear energy is going to be one of the most important sources of alternative energy or clean energy to fulfil the increasing energy demands of the country. As far as the cost precisely is concerned, it varies from plant to plant, and it also depends on the age of the plant. On an average, it comes to about Rs. 3 per unit. For example, Kudankulam has a larger cost maybe around Rs. 4 point something; Tarapur Plant is almost half a century old, so, the cost is less there. So, overall, it is coming like that. But, I am sure, in the times to come, the cost will further reduce as we have more number of plants, as well as they also age and start generating more.

At the same time, the other sources of energy will also start switching over to the atomic energy.

DR. C.M. RAMESH: Sir, what about the CAPEX cost?

DR. JITENDRA SINGH: It has already been increased from time to time. In the year 2019, the Prime Minister took a decision to give us Rs. 10,000 crores per year. This year's Budget was Rs. 17,796.24 crores. So, correspondingly, for the next ten years also, there is a plan to increase the Budget by Rs.10,000 crores per annum.

श्री महेश पोद्दार: उपसभापति जी, नाभिकीय विद्युत उत्पादन की दिशा में इस सरकार में उल्लेखनीय प्रगति हुई है, हम इसका स्वागत करते हैं। अब तक विदेशी तकनीक से विद्युत संयंत्र स्थापित होते थे। मैं माननीय मंत्री महोदय से जानना चाहूंगा कि स्वदेशीकरण की यात्रा में हमने इस मामले में किस हद तक रास्ता तय किया है और इसमें कितने प्रतिशत तकनीक indigenous हो गई है?

डा. जितेन्द्र सिंह : उपसभापति महोदय, आदरणीय सदस्य ने 'आत्मनिर्भर भारत' को लेकर एक बड़ा महत्वपूर्ण प्रश्न पूछा है जो आप सबके लिए प्राथमिकता का विषय है। पहले हमारे अधिकतर प्रोजेक्ट्स रूस और फ्रांस के सहयोग से हुआ करते थे। माननीय सदस्य को और आप सबको यह जानकर खुशी होगी कि अब धीर-धीरे जो हमारे नए रिएक्टर्स लग रहे हैं, वे purely indigenous होते जा रहे हैं और इस दिशा में दिन-प्रतिदिन कार्य बढ़ रहा है।

MR. DEPUTY CHAIRMAN: Q. No. 50, Shri Sambhaji Chhatrapati, not present.