

**EASTERN REGIONAL POWER COMMITTEE**

**AGENDA FOR THE 39<sup>th</sup> MEETING  
OF  
EASTERN REGIONAL POWER COMMITTEE**

**Date: 17.11.2018**

**Place: Jaipur**

<b>ITEM NO. 1</b>	<b>CONFIRMATION OF THE MINUTES OF 38<sup>TH</sup> ERPC MEETING</b>
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The minutes of the 38<sup>th</sup> ERPC meeting held on 30.06.2018 in Kolkata were issued and uploaded on ERPC website (www.erpcc.gov.in) vide ref. no. ERPC/TCC&Committee/14/2018/2392-2461 dated 18.07.2018.

No comments have been received from constituent members on the minutes of the meeting.

**Members may confirm the minutes of 38<sup>th</sup> ERPC meeting.**

<b>ITEM NO. 2</b>	<b>REVIEW OF PERFORMANCE OF THE EASTERN REGIONAL GRID</b>
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ERLDC would give a brief presentation on the performance of the grid during July'18 to October'18.

<b>ITEM NO. 3</b>	<b>ISSUES REFERRED TO ERPC BY TCC IN ITS 39<sup>th</sup> MEETING HELD YESTERDAY</b>
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The issues referred to ERPC by the TCC are placed below: (to be appended after the TCC meeting)

<b>ITEM NO. 4</b>	<b>PRESENTATION ON INDIAN POWER SECTOR SCENARIO IN 2030 BY CENTRAL ELECTRICITY AUTHORITY (CEA)</b>
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At present, the Indian Power Sector is dominated by coal based power plants. This leads to emission of pollution (SO<sub>x</sub>, NO<sub>x</sub> Particulate Matters etc.) into the environment and its consequent impact on health & climate. Keeping all these in views, Government of India has drawn ambitious plan of capacity addition from Renewable Energy Sources. The total capacity of the Renewable Energy Sources is programmed to touch 175 GW by March, 2022. Central Electricity Authority (CEA), being the technical arm of Ministry of Power, Government of India is intimately

associated with drawing up the future plan of Indian Power Sector. Central Electricity Authority (CEA) has carried out the studies regarding the Power Sector scenario in 2030.

Central Electricity Authority (CEA) has been invited to give a presentation on the scenario of the Indian Power Sector in 2030.

<b>ITEM NO. 5</b>	<b>CAPACITY BUILDING PROGRAMME OF EASTERN REGION FUNDED THROUGH PSDF</b>
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34<sup>th</sup> ERPC accorded approval for the following three schemes of ERPC for submission to PSDF Appraisal Committee for the benefit of ER constituents:

- 1) Training for Power System Engineers
- 2) Training on Integration of Renewable Energy resources
- 3) Training on Power market trading at NORD POOL Academy for Power System Engineers of Eastern Regional Constituents

ERPC also authorized Member Secretary, ERPC to attend the PSDF Appraisal Committee meeting on behalf of ERPC forum and do needful for getting PSDF grant for above projects.

Subsequently, the following projects have been granted final approval of PSDF Monitoring committee:

- 1) Training for Power System Engineers
- 2) Training on Power Market Trading at NORD POOL Academy for Power System Engineers of Eastern Regional Constituents

The Sanction by Ministry of Power, GOI for the PSDF grant has been received for both the projects and subsequently Agreement with Nodal Agency (i.e. NLDC have also been signed for both the projects in September, 2018.

#### **A. Training for Power System Engineers of various constituents of Eastern Region.**

This program is basically meant for young entry level engineers working in State Load Despatch centres, State Transmission Utilities, State Gencos, ISGS, DISCOMS & others in Eastern Region, ERLDC, ERPC, CEA, MoP. A sanction of Rs. 61 lacs has been granted from PSDF for this project. The following would be covered in the training programme:

1. Basic understanding of Power system elements. Substation operation & maintenance best practices for entry level engineers of constituents
2. Better Understanding of the nuances of Power system protection. for entry level engineers of constituents
3. Understanding latest technologies and developments on power system protection.
4. To undertake operational studies (basic load flow, computation of TTC/ATC etc.)
5. Commercial settlement mechanisms as per CERC regulations, basic understanding on implication of CERC regulations & various regional accounts

Total 8 nos. of programs each consisting of five days are to be conducted during the duration of two years. Each batch will comprise of 30-40 nos. of participants. The training is expected to be started from December, 2018.

The programme is to be executed by Eastern Regional Power Committee (ERPC) in consultation with Asia Institute of Power Management (AIPM), CESC Ltd. as per the MOU dt.29.03.2017. Regarding the cost involvement and other issues, AIPM has recently furnished the details as given in the **Annexure-I**.

*Therefore, ERPC may authorize to Member Secretary, ERPC on behalf of ERPC forum for the followings:*

- i) To finalize and enter into an agreement with AIPM, CESC for imparting the above training in 8 batches. The agreement will be administered by the Memorandum of Understanding (MoU) dated 29.03.2017 and the latest terms given in Annexure-I.*
- ii) To finalize the course contents in consultation with AIPM and experts in Eastern Region for each training module.*
- iii) Signatory for opening and operating of bank account to handle the above fund.*

## **B. Training on power market trading at NORD POOL Academy for Power System Engineers of Eastern Regional Constituents**

This capacity building programme will contribute towards capacity building and assist the development of a commercially viable and vibrant power market in India. It will also give an

unique opportunity to the Indian participants to learn from the best industry practices and most enriching experiences of Nordic countries in running one of the most successful power exchanges in the world. It would benefit the participants from the State Transmission Utilities (STUs), Distribution Companies, State Load Despatch Centres (SLDCs), Generators (including ISGS), ISTS Licensees in Eastern Region, Power System Operation Corporation (POSOCO) and Eastern Regional Power Committee (ERPC) Secretariat. Participation from Central Electricity Authority (CEA), Ministry of Power, GoI has also been envisaged. A sanction of Rs. 5.46 Crore has been granted from PSDF for this project. The following would be covered in this capacity building programme at NORD POOL Academy:

1. To understand the factors that contributed to the success of the power market liberalization in the Nordic region.
2. Capacity building programme to handle trading of short term surplus power on the Power exchange
3. Price discovery in NORD pool.
4. Determination of transmission tariff and sharing of transmission charges and losses.
5. Financial settlement of power trades, imbalances.
6. Organization of forwards, futures and options market in power, their operation procedures, hedging etc.
7. Retail supply market, Market clearing and settlement, Market surveillance, Imbalance settlement
8. Roles and responsibilities of various stakeholders, Reporting and information sharing, Optimum power reserve estimation, Real time system operation and management
9. Efficient maintenance practices of transmission grids
10. Better Understanding of the regulatory and policy framework of the power market in European countries.
11. Learning the best industry practices in Nordic power market

#### **Details of Activities for Project :**

- The programme will be implemented in four batches over the period of 13 months.

- A batch of 15 participants will participate for each 5-day program from various utilities of Eastern Region including SLDCs, STUs, Generators, ISTS Licensees, DISCOM, POSOCO, ERPC Sectt, CEA and Ministry of Power.
- Training Modules to cover various aspects of Power market operations, impact of renewables through imbalance handling in energy trading as well as cross border trading with neighbouring countries.
- Training Modules for such programs are designed after consultation with partner M/s PTC and NORD POOL Consulting.
- Field visits will be arranged during the programs to impart practical training to the participants

The programme is to be executed by Eastern Regional Power Committee (ERPC) in consultation with partner M/s PTC and Nord Pool Consulting

The following bathes are proposed to be formed comprising of officers from various utilities of Eastern Region including SLDCs, STUs, Generators, ISTS Licensees, DISCOM, POSOCO, ERPC Secretariat, CEA and Ministry of Power for the above training.

<b>Batch</b>	<b>No of Batches</b>	<b>No. of participants per batch</b>	<b>Total Participants</b>
Batch A – Senior Executives ( ERPC members or equivalent Executives)	1	15	15
Batch B Senior Executives (ERPC/ TCC members or equivalent Executives)	1	15	15
Batch C & D (Middle level Executives)	2	15	30

The detailed list of proposed constituent–wise participants is given at **Annexure-II**. The first training program is expected to be started from May/ June, 2019.

*Therefore, ERPC may authorize to Member Secretary, ERPC on behalf of ERPC forum for the followings:*

- i) *To finalize and enter into an agreement with PTC India Ltd. for imparting the above training in 4 batches.*

- ii) *To finalize the course contents in consultation with PTC and experts in Eastern Region for each training module.*
- iii) *Co-ordination between PTC and ERPC constituents for arranging the above training.*
- iv) *Signatory for opening and operating of bank account to handle the above fund.*

***PTC may present the details of training program and draft agreement.***

***ERPC may deliberate.***

<b>ITEM NO. 6</b>	<b>PROPOSAL FOR PARTICIPATION OF STERLITE POWER TRANSMISSION LIMITED AS SPECIAL INVITEE</b>
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Sterlite Power Transmission Limited (SPTL) vide letter dated 12.09.2018 has informed that they have four inter-state transmission projects in Eastern Region (OGPTL, ENICL, NER-II and PKTCL) which are under different stages of commissioning. Overall SPTL owns 12 inter-state power transmission projects and nine sub-stations in India. SPTL stated that in the last few years there has been significant interest and private investment in power transmission sector and requested ERPC to permit them to attend the ERPC meeting as invitee in the interest of strengthening and facilitating the function of planning and integrated operation of the of the power system in the region.

SPTL has presence in Eastern Region through its three projects OGPTL, ENICL and PKTCL and they attend operation and protection sub-committee meetings of ERPC on case to case basis. They also contribute Participation Fees to ERPC Funds as per the decision of ERPC.

As per the resolution of MoP on ERPC there is no provision for private transmission company to be a member of ERPC.

In view of above, it is proposed that SPTL may be invited to TCC & ERPC meetings as Special Invitee in the interest of facilitating integrated operation of the power sector in the region. SPTL shall represent the SPV/companies created for the transmission projects and the SPV/companies shall continue to contribute Participation Fee to ERPC Funds.

***ERPC may approve.***

<b>ITEM NO. 7</b>	<b>PROPOSAL FOR INCLUSION OF POWERGRID(ODISHA PROJECT) AS NEW TCC MEMBER</b>
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It has been informed by Powergrid vide letter no. Odisha/Powergrid/BBSR dt 08.11.2018 that “Powergrid Odisha is presently running as an independent unit having its regional office at Bhubaneswar and headed by an Executive Director. Powergrid Odisha unit is looking after 11 no. of sub-stations of 765 kv AC, and +/- 500 kV HVDC Station and 5200 Ckm of transmission lines”.

It has been noted in the letter that many important agenda items pertaining to Powergrid Odisha are regularly included for discussion in the TCC/ERPC meetings. For effective deliberation, Powergrid Odisha has requested for inclusion of its Executive Director as TCC member.

In this context, it is informed that Executive Director(ER-I) and Executive Director(ER-II) are already included as TCC members. However, there is no representation from Powergrid Odisha Project.

***ERPC may approve Powergrid, Odisha proposal to include it as new TCC member.***

<b>ITEM NO. 8</b>	<b>MANPOWER SHORTAGE IN ERPC, KOLKATA – ENGAGEMENT OF RETIRED MULTI-TASKING STAFF (MTS)</b>
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ERPC Secretariat has been facing acute shortage of manpower almost at every level. Almost 40% of the posts are lying vacant. Vacancy of these posts have been creating impediment to smooth functioning of ERPC Secretariat. The problem gets compounded with the retirement of officers / staff. CEA, HQ has also been facing the similar shortage of manpower. Therefore, there is a little likelihood that the vacant posts would be filled up in imminent future.

It is requested to authorise Member Secretary, ERPC to retain any retiring lower level staff like MTS etc. at ERPC at a monthly consolidated honorarium of Rs. 20000/- (Rupees Twenty thousand only) chargeable from ERPC Establishment Fund. The period of retention shall be upto 65 years or the replacement provided by the Government whichever is earlier.

***ERPC may approve.***

<b>ITEM NO. 9</b>	<b>HOLDING OF TWO DAYS' WORKSHOP AT UPPER KOLAB, ODISHA</b>
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In the 37<sup>th</sup> ERPC Meeting held on 17.03.2018, an amount of Rs. 10,00,000/- (Rupees Ten lakh only) was sanctioned from ERPC Establishment Fund for organising interactive Workshops / Seminars at different locations of the Eastern Region for the benefits of Eastern Regional Constituents.

Accordingly, with the consent of Chairman, ERPC the Workshop was organised at Bariniput, Upper Kolab, Odisha from 26.09.2018 to 27.09.2018. An amount of Rs.3,50,482/- (Rupees Three lakh fifty thousand four hundred and eighty two only) was spent by OHPC Limited as intimated vide letter No. OHPC/UKHEP/Fin/5112(W.S) dated 12.10.2018.

The amount was subsequently reimbursed to OHPC Limited from ERPC Establishment Fund.

It is proposed to hold similar type of workshops at other locations of the Eastern Region.

*This is for the kind information of the members of ERPC.*

<b>ITEM NO. 10</b>	<b>SIMULATOR TRAINING PROGRAMME AT BAKRESWAR THERMAL POWER PROJECT, BIRBHUM, WEST BENGAL</b>
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A Simulator Training Programme in 210 MW Thermal Power Training Institute, Bakreswar, Birbhum, West Bengal was arranged for ERPC & ERLDC Engineers during the period from 06.08.2018 to 11.08.2018. Total 10 numbers engineers were attended the training programme.

The training programme included:

- i) System familiarisation (Theory along with equipment start /stop from desk in simulator)
- ii) Plant Visit.
- iii) Unit light up to Synchronisation (Theory plus Simulator).



An amount of Rs. 18,880/- (Rupees Eighteen thousand eight hundred eighty only) was spent per participant for the above training programme. The training programme was found to be very useful.

*This is for the kind information of ERPC Members.*

Further, an amount of Rs. 18,880/- (Rupees Eighteen thousand eight hundred eighty only) was also spent for the training programme of Shri S.M.Jha, Consultant, ERPC. This amount was spent from ERPC Establishment Fund.

*Post facto approval for the above expenditure may please be accorded.*

<b>ITEM NO. 11</b>	<b>EXPENDITURES FROM ERPC ESTABLISHMENT FUND</b>
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The following expenditures have been incurred from ERPC Establishment Fund:

- i) Rs.1,02,072/- paid to ITDC Ltd. towards cost of air tickets of ERPC Secretariat Officers to attend 39<sup>th</sup> TCC & ERPC meetings.
- ii) Rs.18880/- paid to Bakreswar Thermal Power Project (WBPDCL) for simulator training of Shri S.M. Jha, Consultant.
- iii) Rs.55,78,207/- paid to CPWD towards progressive payment for R&M of ERPC Staff Quarters Building.

**This is for information of members.**

<b>ITEM NO. 12</b>	<b>ERPC ESTABLISHMENT FUND FOR THE YEAR 2018-19</b>
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For the year 2018-19, contribution of Rs.15 Lakh per member was approved by ERPC in its 37<sup>th</sup> meeting held on 17.03.2018. Contributions from the following member organisation is still due:

- i. Adhunik Power & Natural Resources Limyed (APNRL)

**APNRL is requested to contribute.**

<b>ITEM NO. 13</b>	<b>ERPC FUND FOR THE YEAR 2018-19</b>
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For the year 2018-19, contribution of Rs.1 Lakh per member was approved by ERPC in its 37<sup>th</sup> meeting held on 17.03.2018. Contributions from the following member organisation is still due:

- i. Adhunik Power & Natural Resources Limited (APNRL)

**APNRL is requested to contribute.**

<b>ITEM NO. 14</b>	<b>CONTRIBUTION OF PARTICIPATION FEE FOR THE YEAR 2016-17, 2017-2018 &amp; 2018-19</b>
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In the 33<sup>rd</sup> ERPC meeting held on 25<sup>th</sup> June 2016 it was decided apart from Members, all other Users/Utilities intending to avail services of ERPC have to pay 'Participation Fee' by contributing to 'ERPC Establishment Fund' and 'ERPC Fund' at an equal yearly contribution fixed for ERPC Members. Accordingly, letters were issued to Users/Utilities from time to time for payment of 'Participation Fee'. Contributions from the following organisations are still due:

- i) Ind-Barath Energy (Utkal) Ltd. (IBEUL) : Rs.48 lakh (2016-17, 2017-18 & 2018-19)
- ii) Gati Infrastructure Private Ltd. (GIPL): Rs.32 lakh (2017-18 & 2018-19)
- iii) Darbhanga Motihari Transmission Company Ltd. (DMTCL) : Rs. 16 lakh (2018-19)

**IBEUL, GIPL & DMTCL are requested to contribute.**

<b>ITEM NO. 15</b>	<b>FINALISATION OF DATES AND VENUE FOR THE NEXT ERPC &amp; TCC MEETINGS</b>
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The roster for hosting of ERPC meetings is given below:

<b>Sl. No.</b>	<b>Host Organisation</b>
1.	<b>WEST BENGAL</b> - hosted 26 <sup>th</sup> ERPC Mtg. on 18.01.2014
2.	<b>DVC</b> - hosted 38 <sup>th</sup> ERPC Mtg. on 30.06.2018
3.	<b>NHPC</b> - hosted 27 <sup>th</sup> ERPC Mtg. on 31.05.2014
4.	<b>POWERGRID</b> - hosted 37 <sup>th</sup> ERPC Mtg. on 17.06.2018
5.	<b>SIKKIM</b> - hosted 29 <sup>th</sup> ERPC Mtg. on 14.02.2015
6.	<b>PTC</b> - hosted 28 <sup>th</sup> ERPC Mtg. on 13.09.2014
7.	<b>ODISHA</b> - hosted 31 <sup>st</sup> ERPC Mtg. on 14.11.2015
8.	<b>JHARKHAND</b> - hosted 32 <sup>nd</sup> ERPC Mtg. on 20.02.2016
9.	<b>BIHAR</b> - hosted 33 <sup>rd</sup> ERPC Mtg. on 25.06.2016
10.	<b>NTPC</b> - hosted 30 <sup>th</sup> ERPC Mtg. on 20.06.2015

11.	CESC - hosted 34 <sup>th</sup> ERPC Mtg. on 19.11.2016
12.	APNRL - hosted 23 <sup>rd</sup> ERPC Mtg. jointly on 22.12.2012
13.	MPL - hosted 35 <sup>th</sup> ERPC Mtg. jointly on 25.02.2017
14.	GMRKEL – hosted 36 <sup>th</sup> ERPC Mtg.
15.	NVVN - hosted 39 <sup>th</sup> ERPC Mtg.
16.	TPTCL - hosted 35 <sup>th</sup> ERPC Mtg. jointly on 25.02.2017
17.	JITPL - yet to host ERPC Mtg.
18.	Teesta Urja Ltd. - yet to host ERPC Mtg.

APNRL was approached to host the next (39<sup>th</sup>) TCC & ERPC meetings vide letter dated 06.06.2018. In response, APNRL has informed that APNRL being a stressed asset company is passing financial constraints and few other related issues. However, they agreed to consider hosting TCC & ERPC meetings jointly with another constituent in the later half of financial year 2019-20.

Jindal India Thermal Power Project (JITPL) and Teesta Urja Limited (TUL) were also approached to host TCC and ERPC meetings. Both the organisations expressed their difficulty to host the meeting in 2018-19 due to financial constraints, but agreed to host at later opportunity.

**West Bengal** (WBSEDCL, WBSETCL, WBPDCCL & DPL) has last hosted TCC & ERPC meetings (26<sup>th</sup>) on 18.01.2014. West Bengal has indicated to host ERPC meeting in the next financial year.

*In view of above, Members may discuss and decide on the host, the dates and the venue for the next TCC & ERPC meetings.*

<b>ITEM NO. 16</b>	<b>ANY OTHER ITEM WITH THE PERMISSION OF THE CHAIR</b>
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## **Training Proposal for the constituent Members of ERPC by AIPM**

The Asia Institute of Power Management(AIPM), the training arm of CESC Limited, will conduct training on contemporary technical topics(Protection, Operation and Maintenance of Electrical Assets, Safety Smart Grid, Renewable generation and integration etc.) as required for the constituent member of ERPC as and when desired by the Member Secretary ERPC.

AIPM is agreeable to conduct total eight(08) number of programmes in two years of which two(02) number of programmes to be conducted in FY 2018-19 and six(06) number of programmes to be conducted in FY 2019-20 as M/S ERPC projects the training requirements in the next two years.

### **Programme Topics**

Power System Protection, Operation& Maintenance,Asset Management, Smart Grid initiatives and applications, Network Planning and Associated Topics depending on the requirements of ERPC.

### **Duration of Training:**

The training programme will be of five(05) days duration with class room lectures and adequate field trips. Usually the session will start on Monday and end on Friday.

On finalisation of any training programme and date, AIPM should get the name or number of participants with Male / Female break up and choice of foods (Veg/Non Veg) at least 7 days before the day of commencement of the programme.

### **Facilities:**

The institute will provide classroom/faculty/training kit/study materials in pen-drive, working lunch, tea and snacks during the training session and local transport for technical visits.

The institute will neither provide any pick up /drop facility for attending to the training programme nor any accommodation.

### **Batch size:**

For best dissemination of knowledge and interaction of the participants with the trainer, AIPM suggest batch size should be about 30 participants and the participants are also expected of reasonably uniform level and qualification / background.

### **Faculty:**

The faculty will be selected by the institute in consultation with Member Secretary ERPC, however all costs related to faculty should be borne by the institute.

**Training Venue:**

Venue of the training programme will be normally at AIPM or ERPC Secretariat. However depending on the nature of training and number of participants, the venue may be changed in consultation with the Member Secretary ERPC.

**Training Fees:**

Training Fees will be Rs 6,00,000/-(Rupees Six Lakh only) excluding GST for each of the two number training programmes to be conducted in FY 2018-19. Training Fees be will be Rs 6,50,000/-( Rupees Six Lakh fifty thousand only) excluding GST for each of the the rest 6 (six) number training programmes to be conducted in the FY 2019-20.

(It may kindly be noted that AIPM conducted a similar 5 days training programme in 2017-18 with Rs5,55,000/-(Rupees Five lakh fifty-five thousand) for a batch of 30 participants for. The institute has enhanced only 9% as inflation coverage for 2018-19 and 2019-20 for similar training programme.

**Payment terms:**

After completion of each training, all-inclusive invoice should be raised to ERPC. Payments should be made within one month following the date of submission of bills.

## Annexure-II

The detailed list of proposed State/constituent-wise participants for the Foreign Training

Serial No.	State/Org.	1 <sup>st</sup> Batch (ERPC members or equivalent executive)	2 <sup>nd</sup> Batch (TCC members or equivalent executive)	3 <sup>rd</sup> Batch (Middle Level Executives)	4 <sup>th</sup> Batch (Middle Level Executives)	Remarks
1	Bihar	2	1	3	1	Among State Gencos, STU, SLDC, Discoms
2	Jharkhand	2	1	2	1	„
3	Odisha	2	1	3	1	„
4	West Bengal	2	1	3	1	„
5	Sikkim	1	1	1	1	„
6	DVC	1	1	1	1	
7	ERPC	1	2	2	2	
8	ERLDC	1	2		1	
9	NLDC	1			1	
10	CEA	1			1	
11	MoP, GoI	1			1	
12	NTPC		1		1	
13	NHPC		1		1	
14	Powergrid		1		1	
15	NVVN		1			
16	PTC		1			
<b>TOTAL</b>		<b>15</b>	<b>15</b>	<b>15</b>	<b>15</b>	