República de Panamá

AUTORIDAD NACIONAL DE LOS SERVICIOS PÚBLICOS

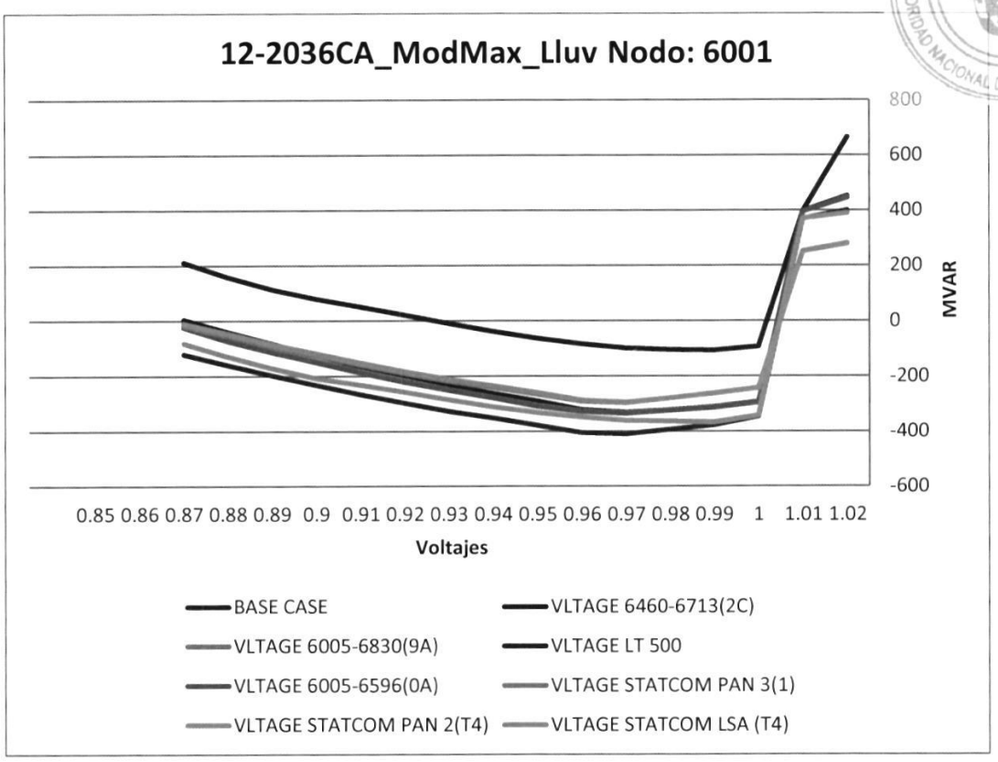
Resolución AN No. 22195 -Elec Panamá, 16 de octubre de 2026

"Por la cual se aprueba el Plan de Expansión del Sistema Interconectado Nacional correspondiente al año 2025, presentado por la Empresa de Transmisión Eléctrica, S.A. (ETESA)"

TOMO XXIX

Pág. 5601 a pág. 5800

5601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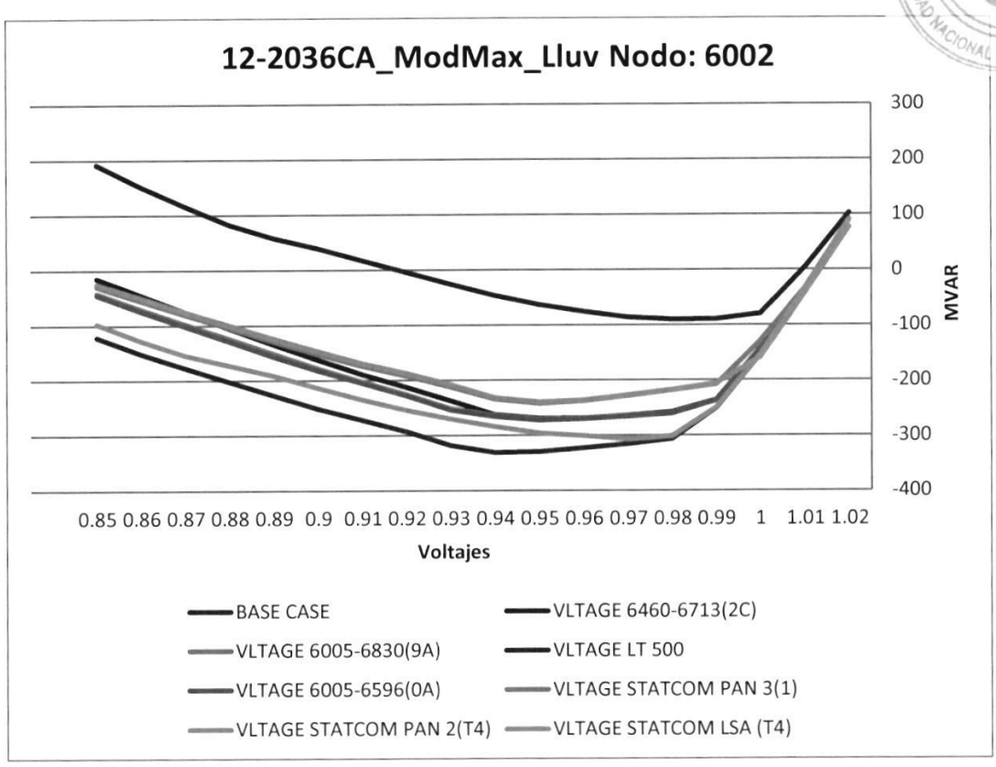
Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

5602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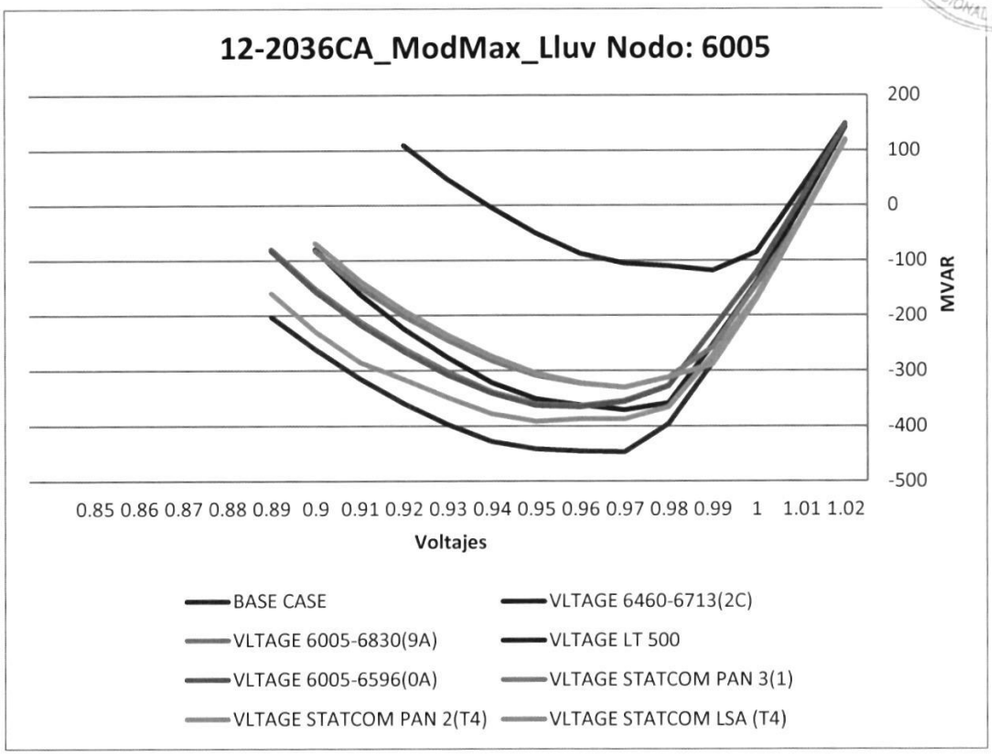
Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

5603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Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

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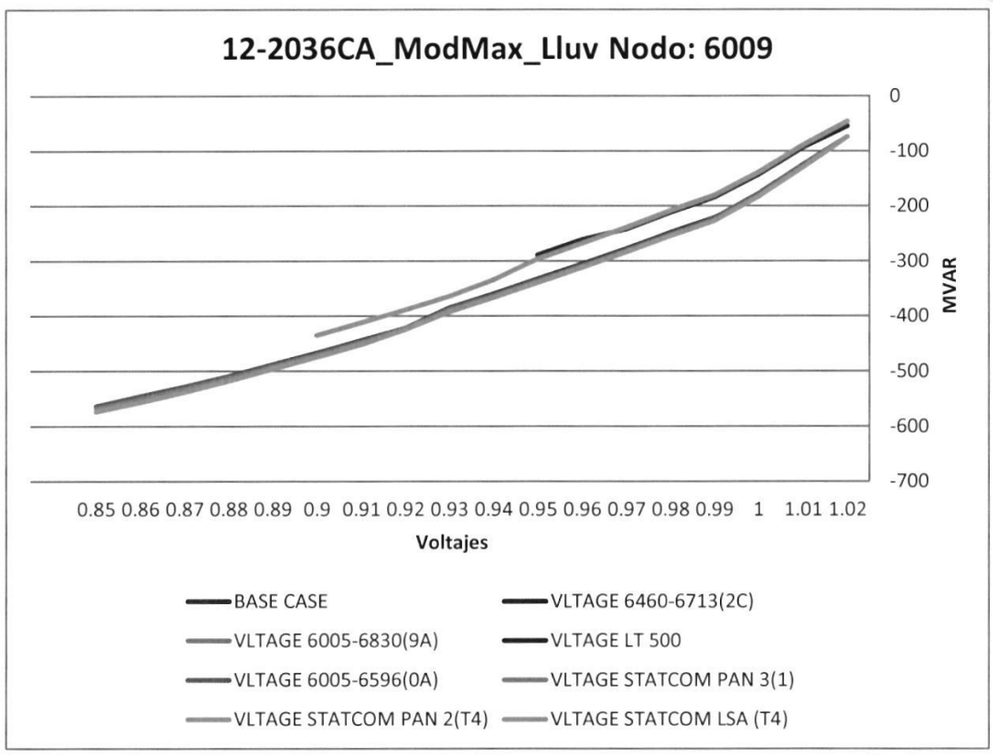
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-300
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MVAR
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Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

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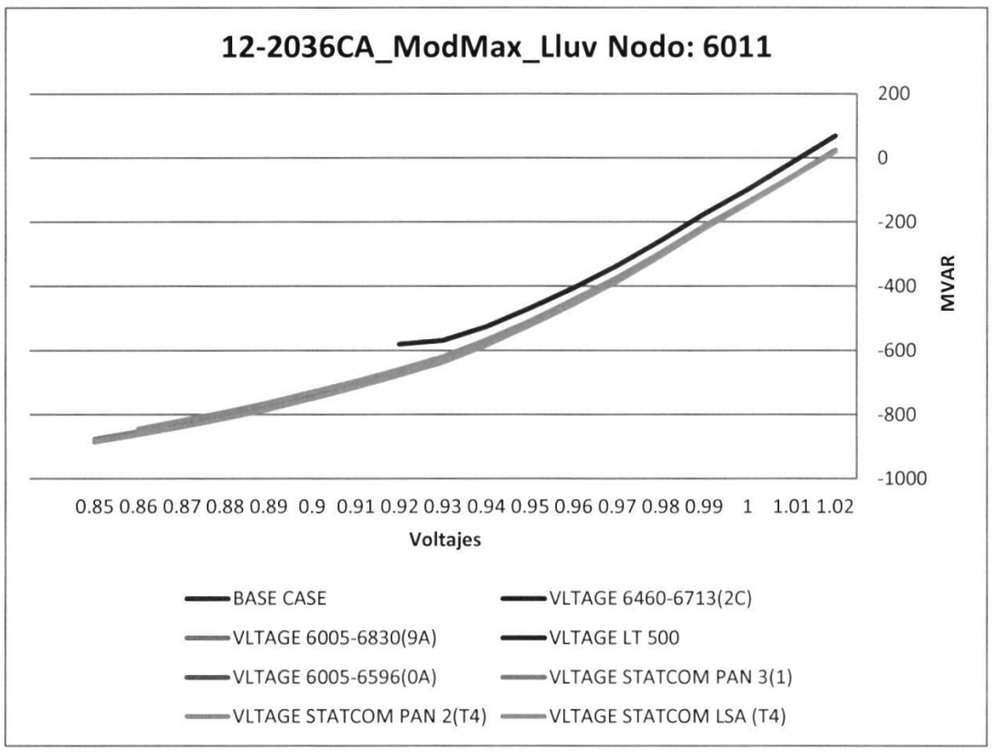
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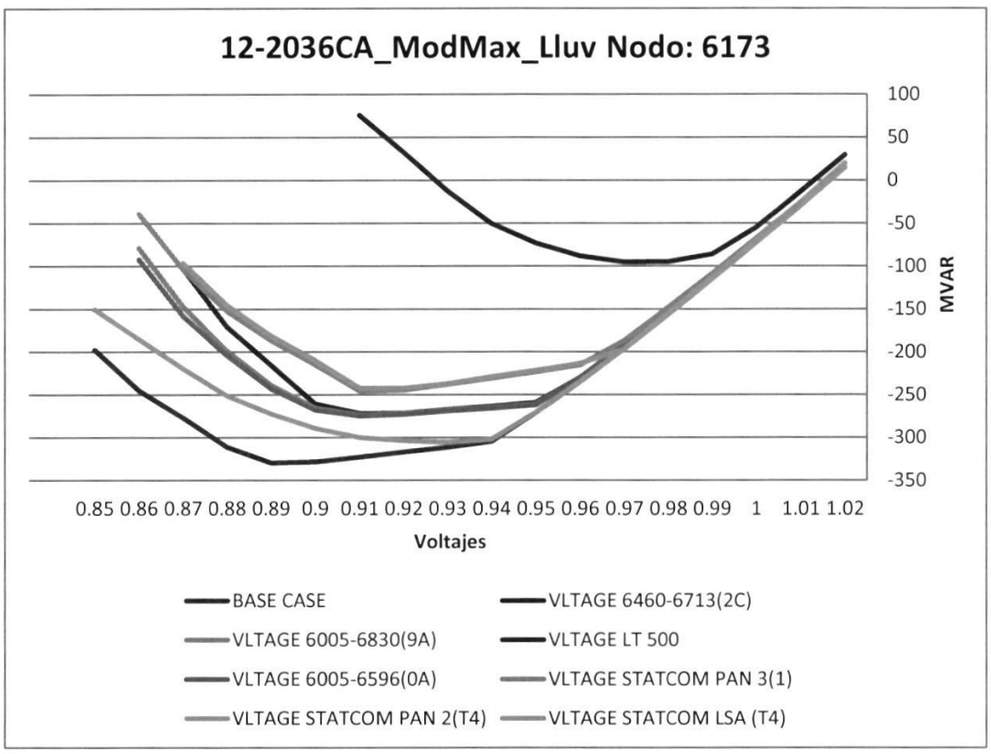
-400
-600
-800
-1000
MVAR
0.85 0.86 0.87 0.88 0.89 0.9 0.91 0.92 0.93 0.94 0.95 0.96 0.97 0.98 0.99 1 1.01 1.02
Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

5606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Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

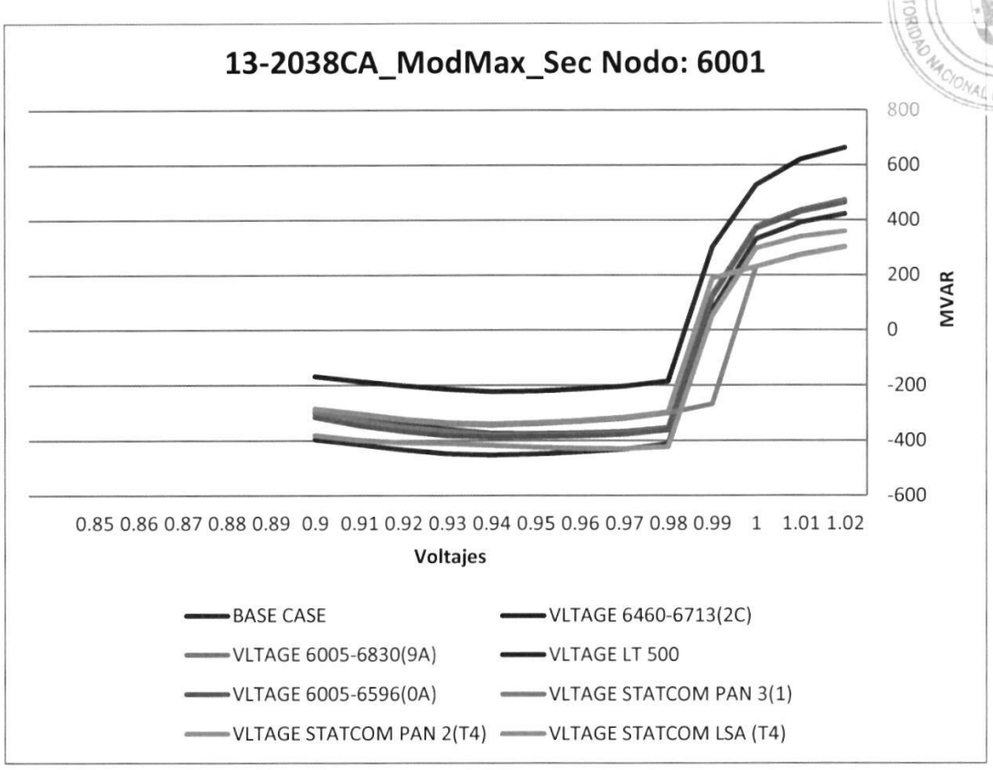
NODO	BASE CASE	VLTAGE 6460-6713(2C)	VLTAGE 6005-6830(9A)	VLTAGE LT 500	VLTAGE 6005-6596(0A)	VLTAGE STATCOM PAN 3(1)	VLTAGE STATCOM PAN 2(T4)	VLTAGE STATCOM LSA
6001	-410.4621277	-331.288208	-333.1951599	-106.6329269	-335.0527649	-297.1412354	-294.581665	-366.6161194
6002	-330.8958435	-269.4651184	-270.9733887	-90.00801086	-272.4376831	-242.6931152	-239.5262909	-307.1612244
6005	-446.6098328	-370.916687	-363.432251	-118.5214539	-365.8227539	-330.5293884	-330.4067993	-391.5821228
6009	-516.715271	-563.7133789	-565.031311	-288.9366455	-563.6036377	-568.3989258	-573.251709	-434.8471985
6011	-883.6627197	-850.3378906	-875.9404907	-580.2768555	-852.6538696	-876.6116943	-882.0505981	-844.5786743
6173	-329.6559448	-271.9071655	-273.5128784	-95.38635254	-274.8963928	-245.4747162	-242.2799988	-305.8042603

5607

5608

2038 SECA

5609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-400
-600
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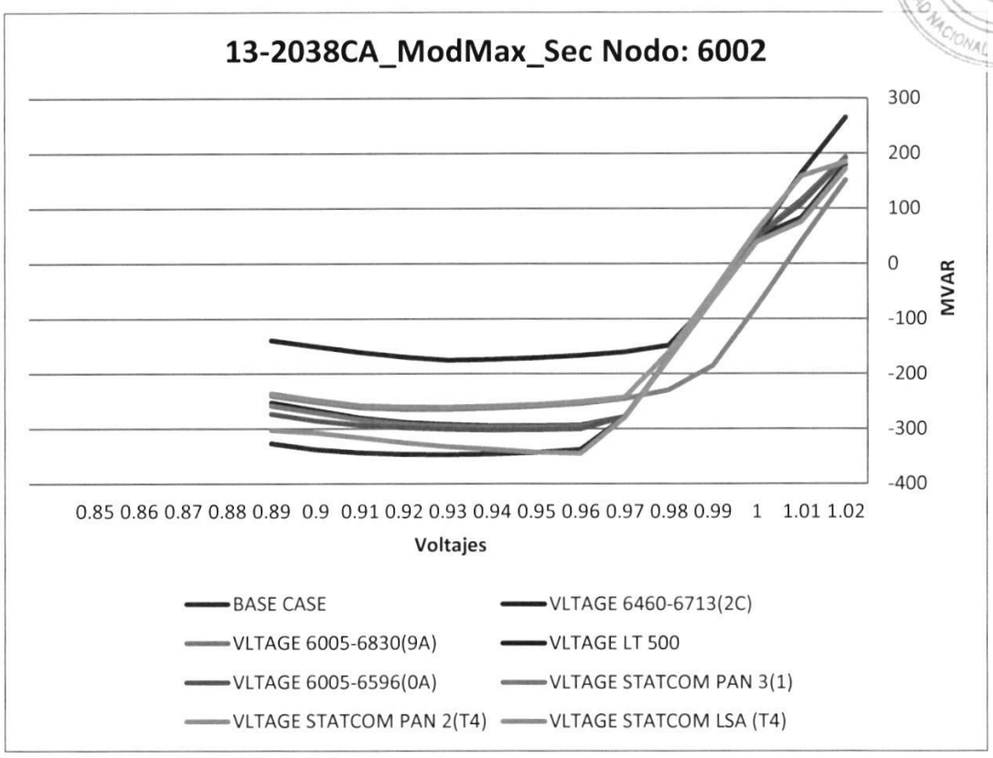
Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

5610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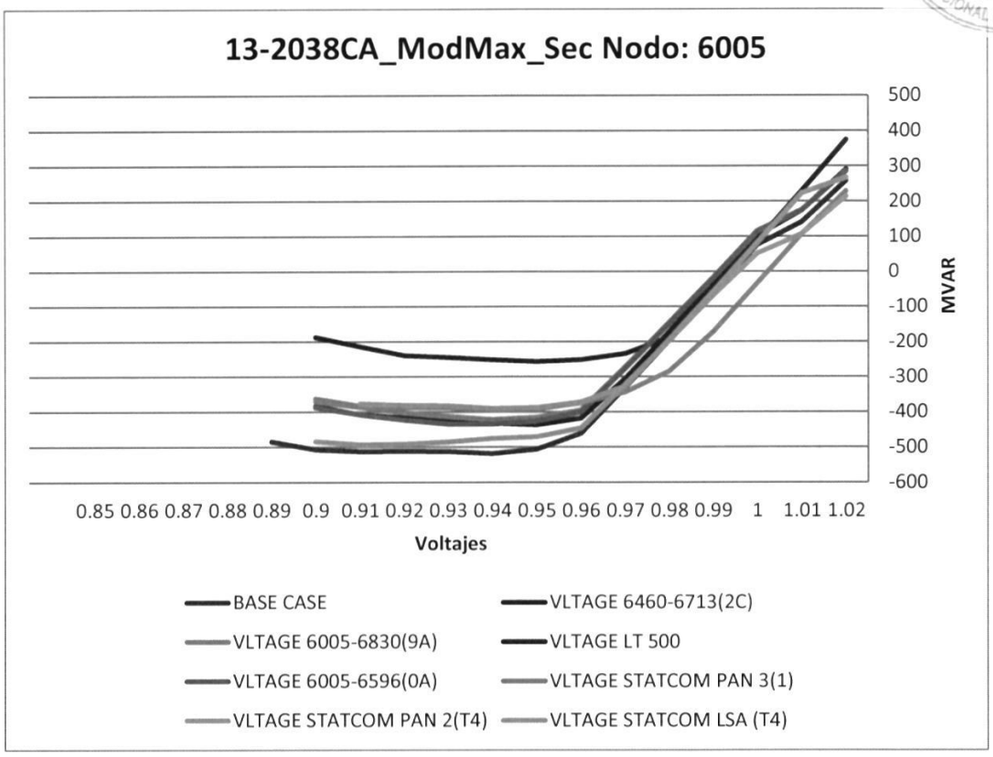
-300
-400
MVAR
0.85 0.86 0.87 0.88 0.89 0.9 0.91 0.92 0.93 0.94 0.95 0.96 0.97 0.98 0.99 1 1.01 1.02
Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

5611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0
-100
-200
-300
-400
-500
-600
MVAR
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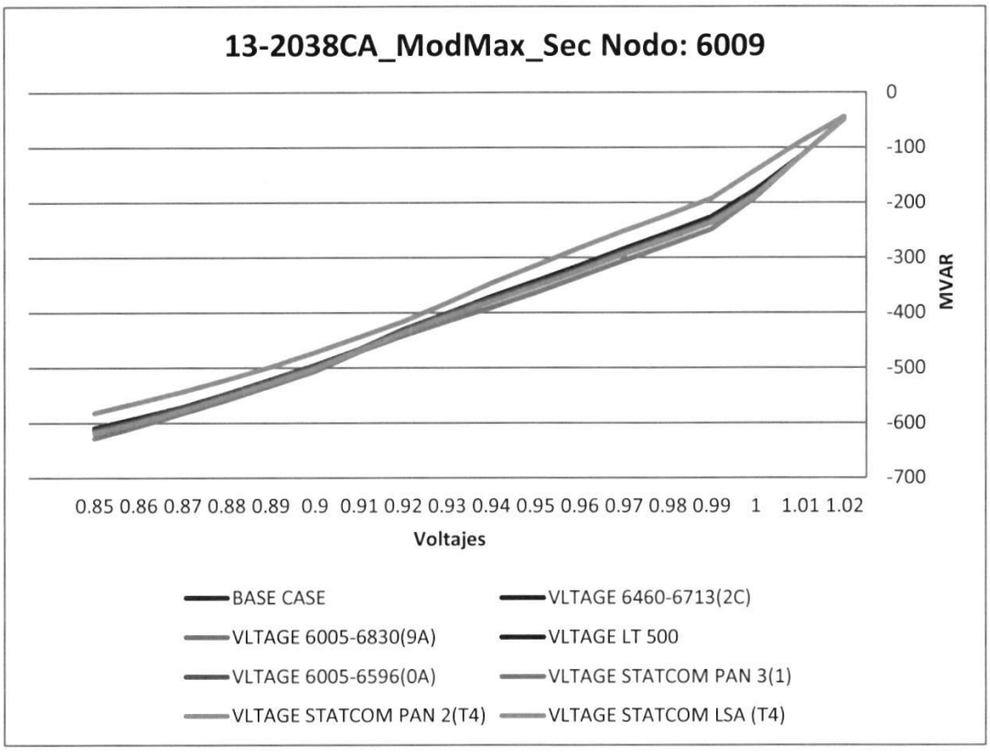
Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

5612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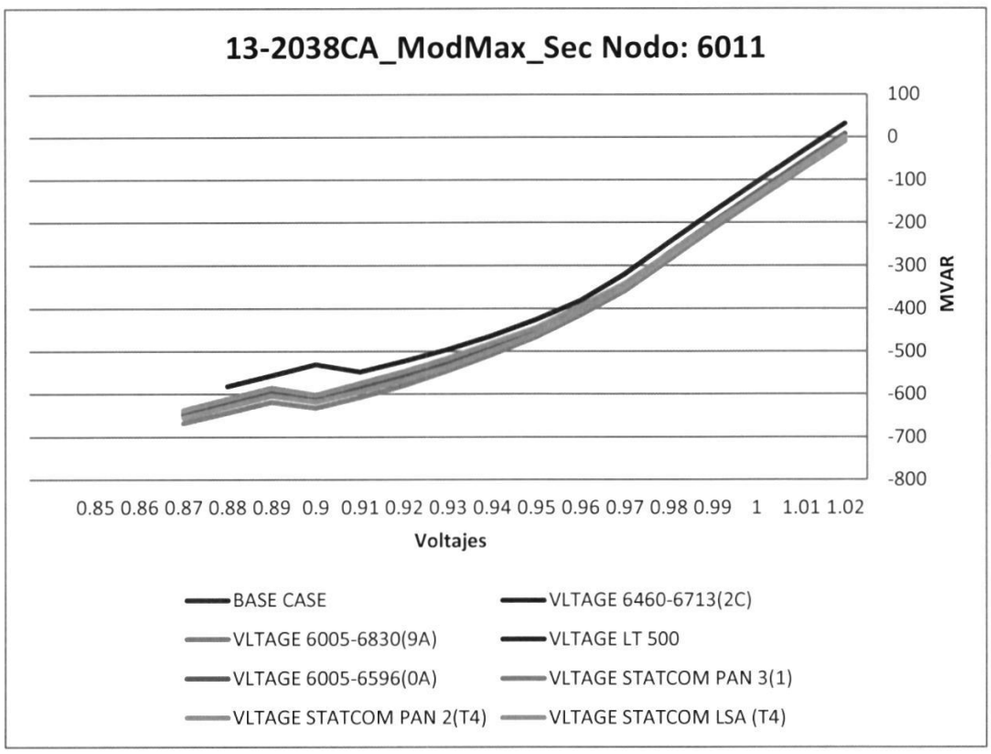
Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

5613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Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

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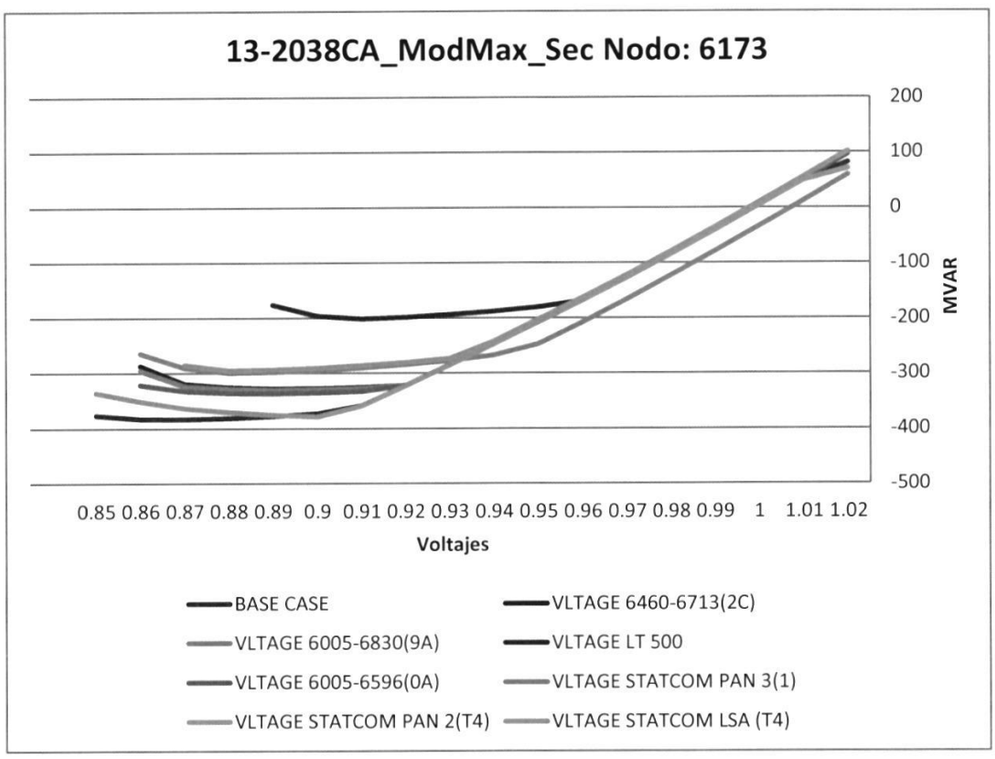
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MVAR
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Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

5615

NODO	BASE CASE	VLTAGE 6460-6713(2C)	VLTAGE 6005-6830(9A)	VLTAGE LT 500	VLTAGE 6005-6596(0A)	VLTAGE STATCOM PAN 3(1)	VLTAGE STATCOM PAN 2(T4)	VLTAGE STATCOM LSA
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6002	-347.0743103	-294.666748	-296.5836182	-175.174469	-302.4515076	-264.4535828	-260.4985962	-344.9090881
6005	-518.3571167	-437.0776672	-421.9367065	-257.2070007	-434.6123657	-395.1691284	-390.5193176	-492.526825
6009	-617.9003906	-608.8786621	-609.1712036	-610.1292114	-613.1635742	-627.5278931	-617.7280273	-581.8137817
6011	-654.991333	-643.8557129	-643.9213867	-581.630249	-647.956543	-667.4419556	-654.9003906	-637.2328491
6173	-383.0831909	-327.7850037	-330.2790222	-201.515625	-336.5420532	-299.0897522	-294.7445984	-378.9788818



2038 LLUVIOSA

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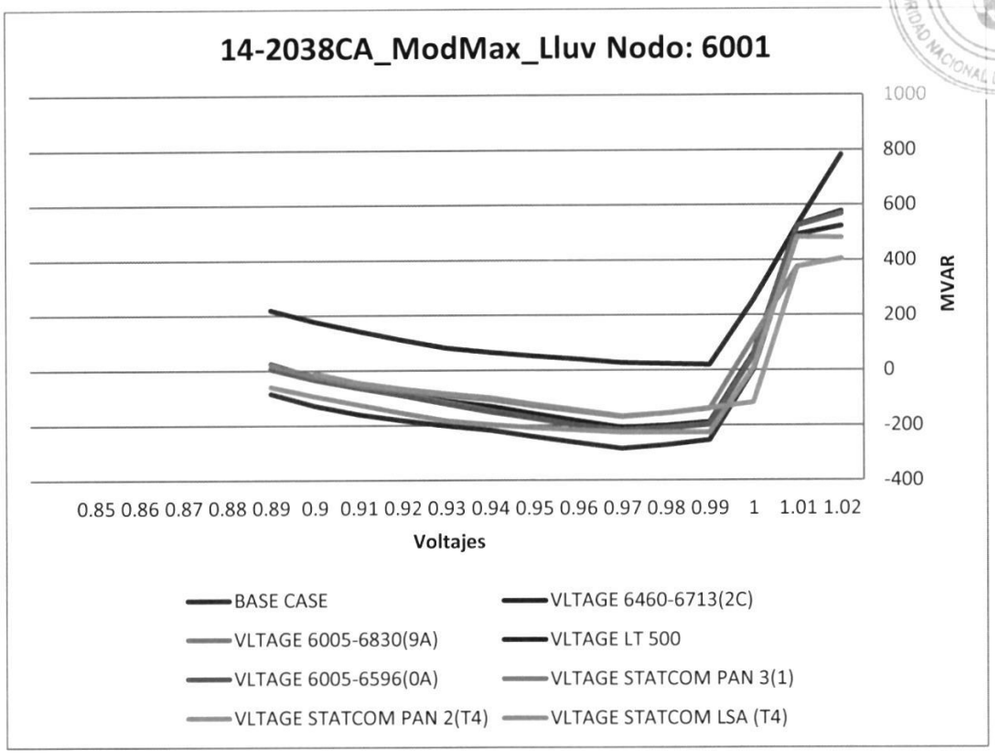
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Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

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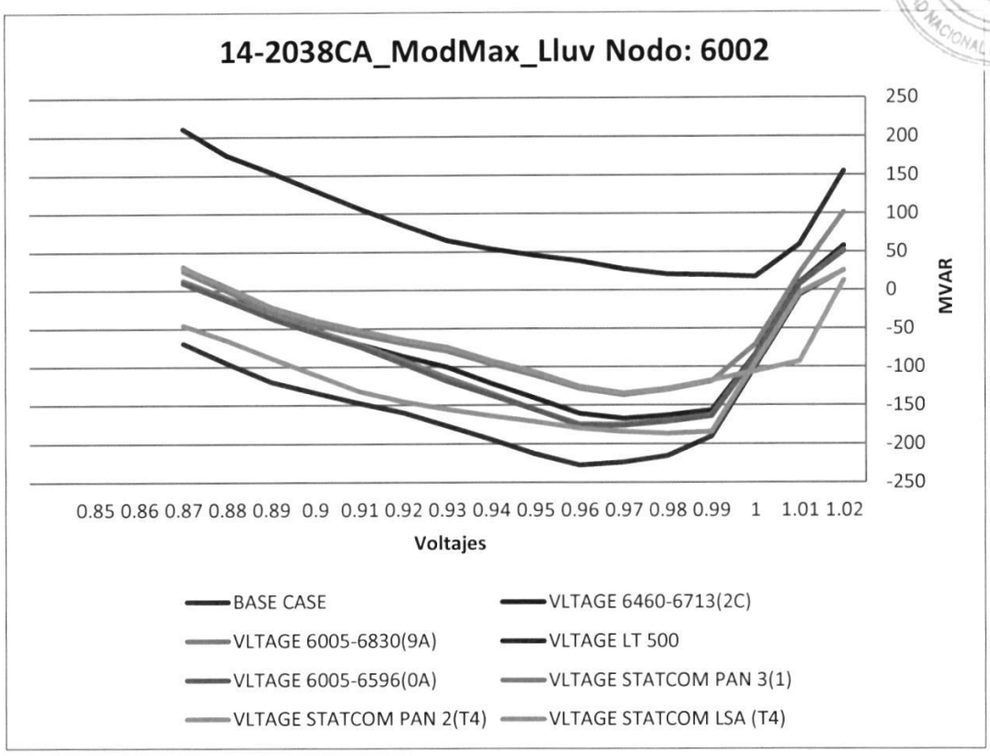
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-200
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Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

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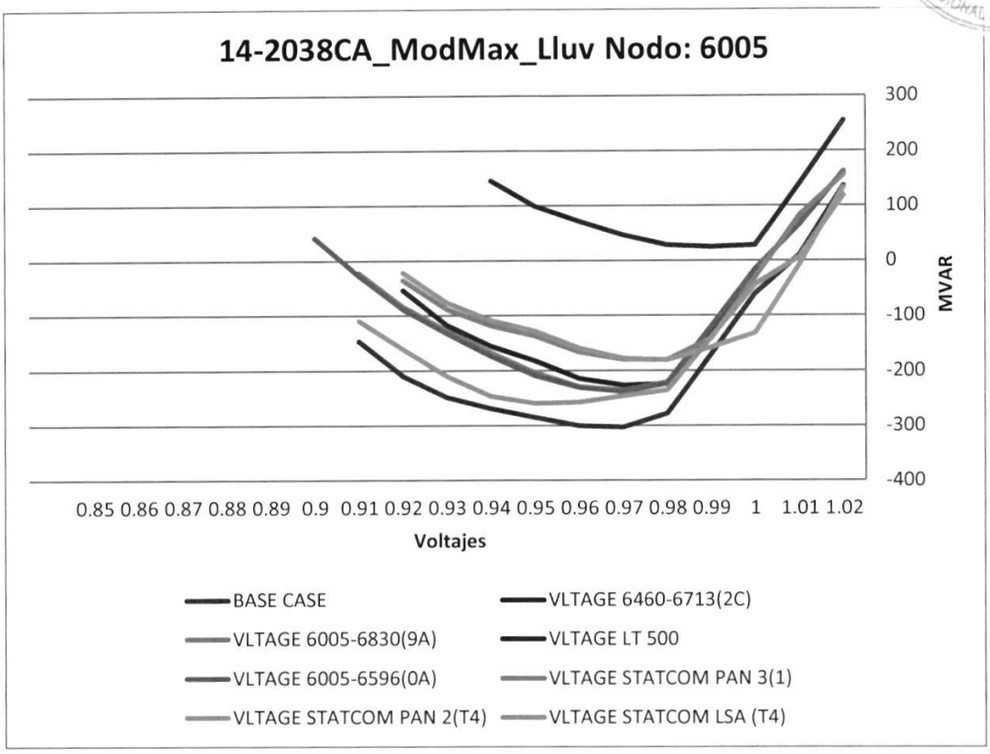
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Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
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VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

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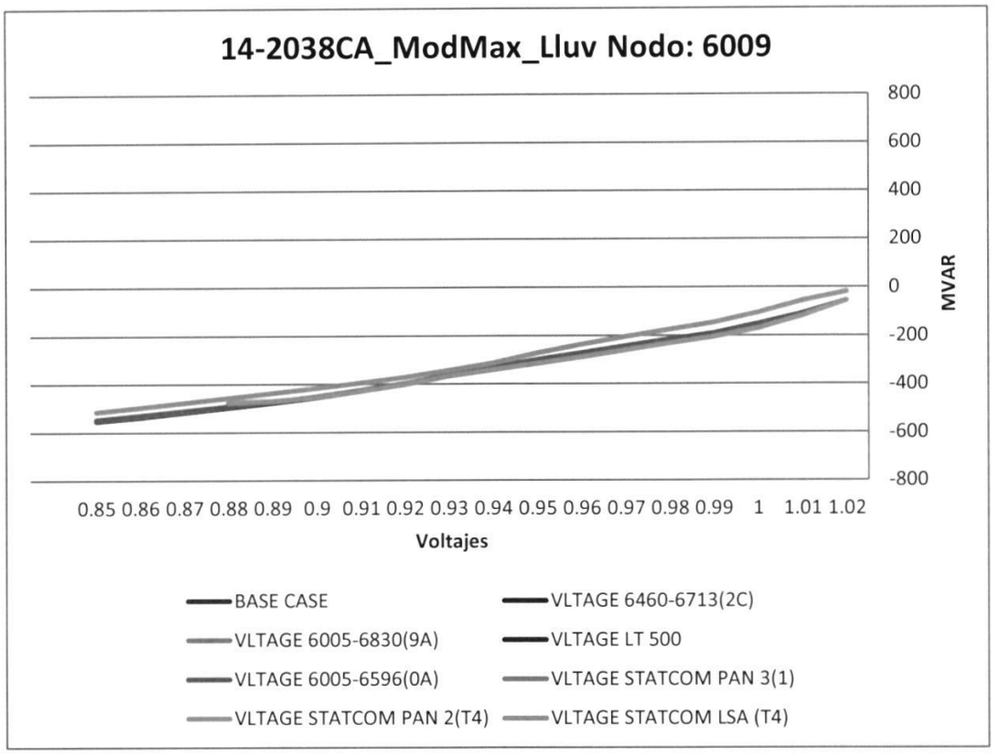
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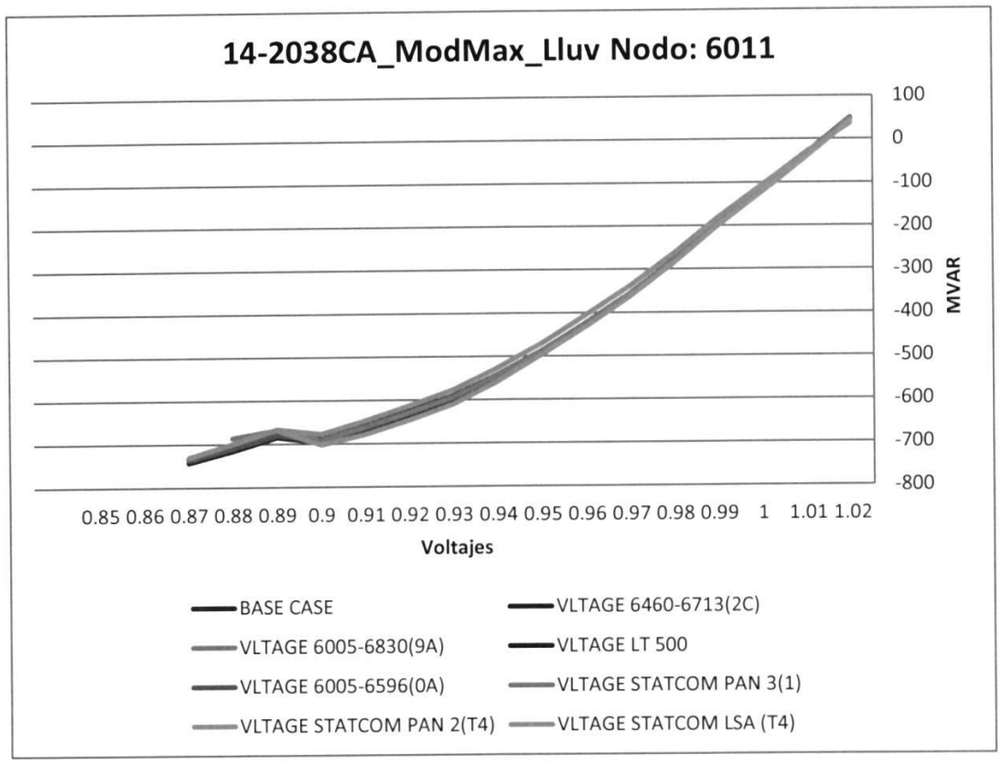
Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

5621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-700
-800
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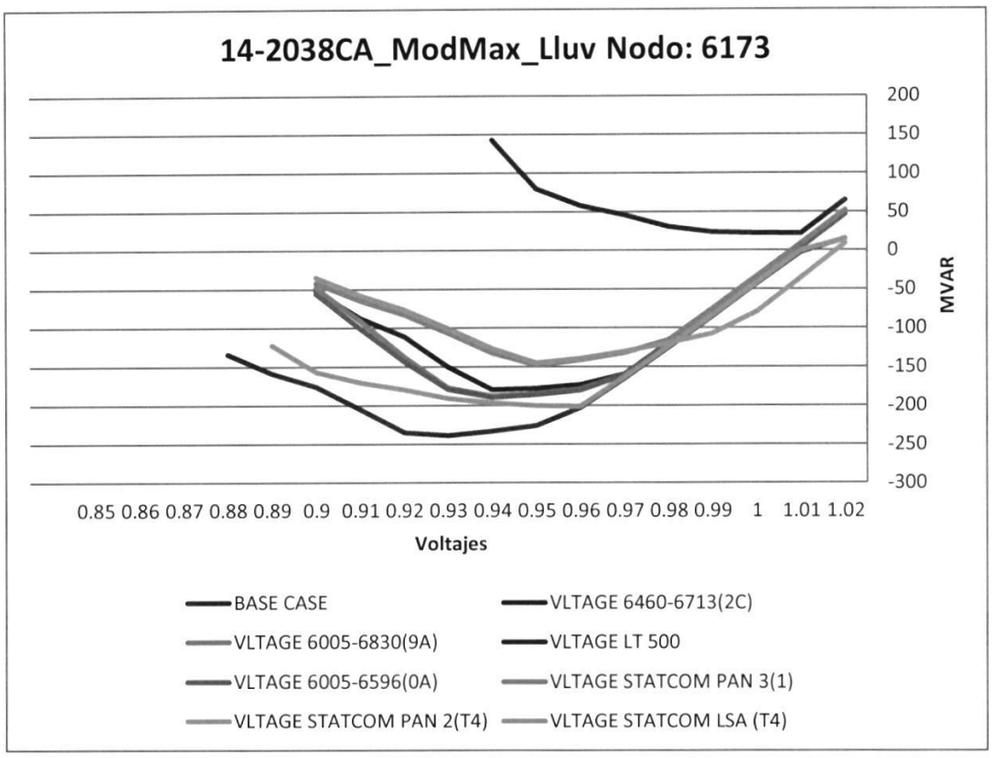
0.85 0.86 0.87 0.88 0.89 0.9 0.91 0.92 0.93 0.94 0.95 0.96 0.97 0.98 0.99 1 1.01 1.02
Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

5622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0
-50
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-200
-250
-300
MVAR
0.85 0.86 0.87 0.88 0.89 0.9 0.91 0.92 0.93 0.94 0.95 0.96 0.97 0.98 0.99 1 1.01 1.02
Voltajes
BASE CASE
VLTAGE 6460-6713(2C)
VLTAGE 6005-6830(9A)
VLTAGE LT 500
VLTAGE 6005-6596(0A)
VLTAGE STATCOM PAN 3(1)
VLTAGE STATCOM PAN 2(T4)
VLTAGE STATCOM LSA (T4)

5623

NODO	BASE CASE	VLTAGE 6460-6713(2C)	VLTAGE 6005-6830(9A)	VLTAGE LT 500	VLTAGE 6005-6596(0A)	VLTAGE STATCOM PAN 3(1)	VLTAGE STATCOM PAN 2(T4)	VLTAGE STATCOM LSA
6001	-284.756012	-207.6918335	-218.1247711	19.09681511	-220.098587	-169.6417236	-166.9279022	-226.4028778
6002	-227.401825	-167.105484	-174.6829224	17.21119118	-176.2086945	-136.7781525	-134.5321808	-186.7764587
6005	-303.147644	-226.1422119	-235.9533539	24.7499218	-238.0185852	-180.3158264	-180.9794312	-259.4300232
6009	-552.8881836	617.7079468	-547.9106445	409.5555725	-546.444458	-55.18877029	-475.3714905	-514.3247681
6011	-743.043396	-734.7062378	-736.4376221	51.39909363	-736.2595215	-692.1456909	-702.7087402	-730.6155396
6173	-238.8142395	-179.5709686	-187.8569183	21.87684059	-189.3964844	-147.5505676	-144.9299927	-201.049469

5624

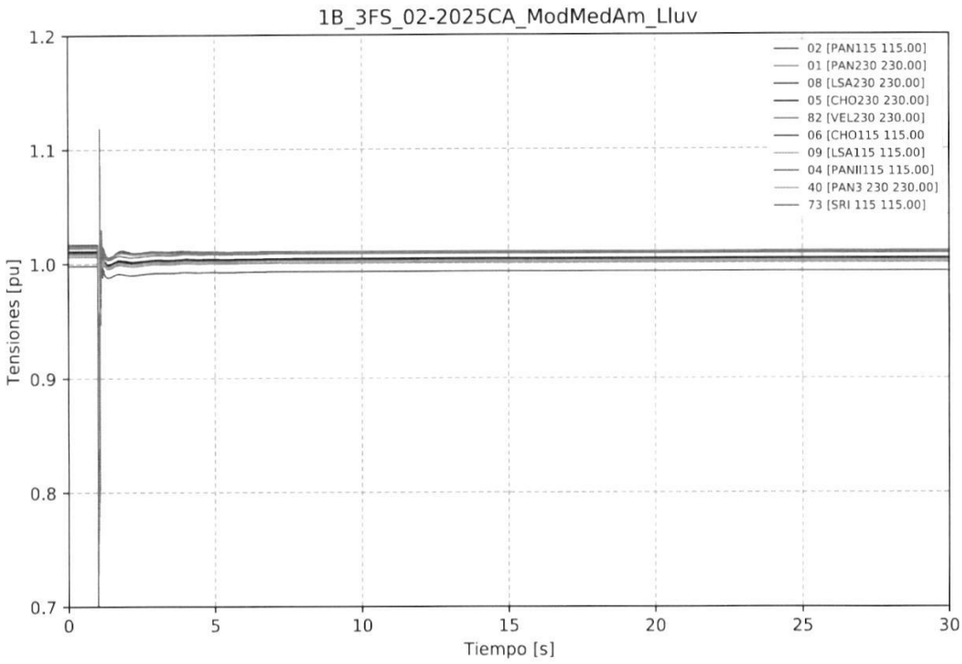
ANEXO VI

ANÁLISIS DINÁMICOS

CORTO PLAZO

5625

1. FALLAS DE GENERACIÓN – MÉXICO INTERCONECTADO



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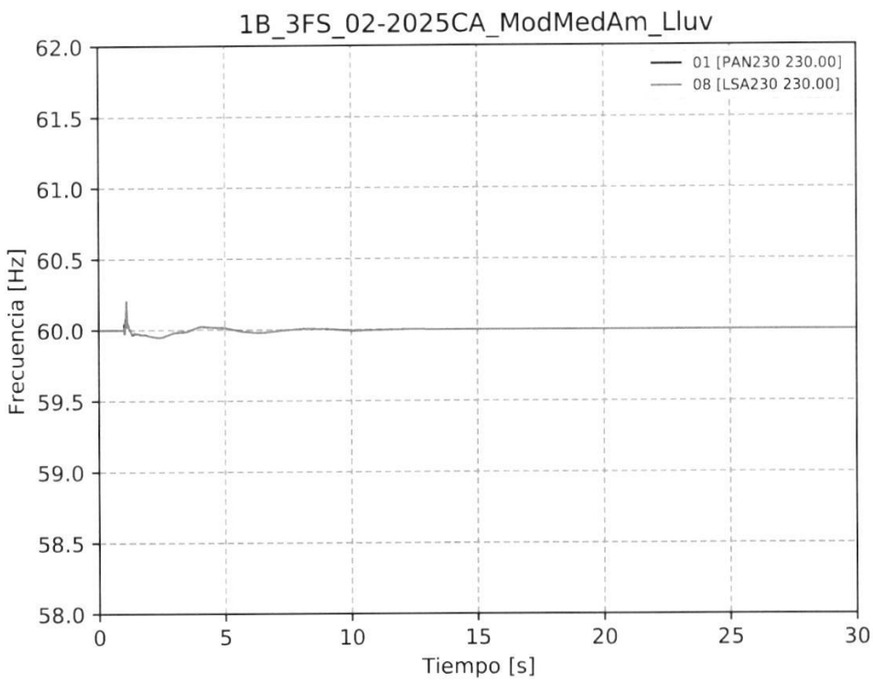
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Frecuencia [Hz]
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61.0
60.5
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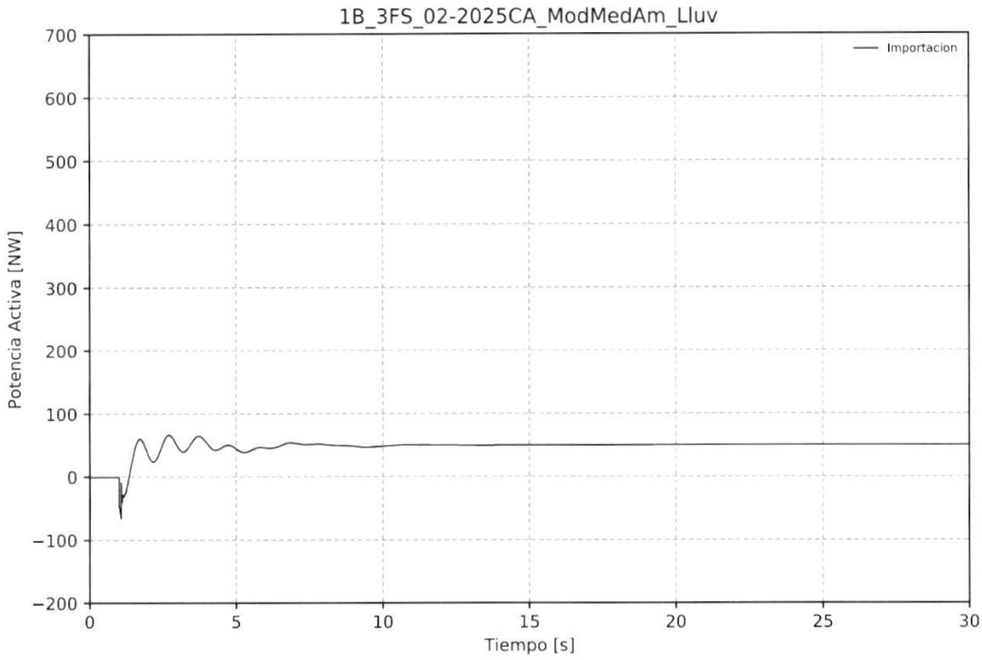
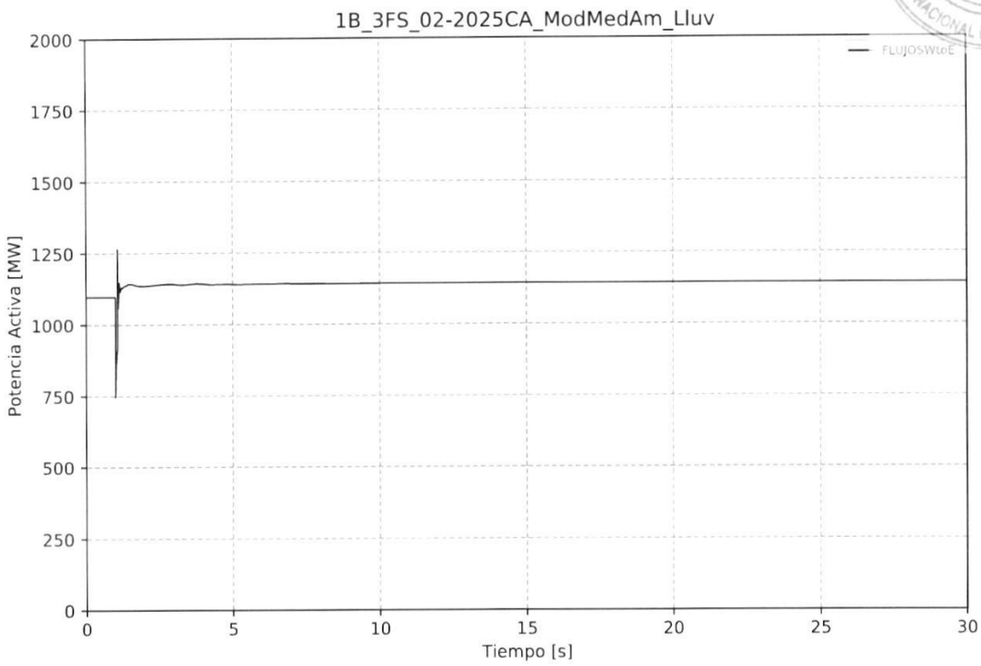
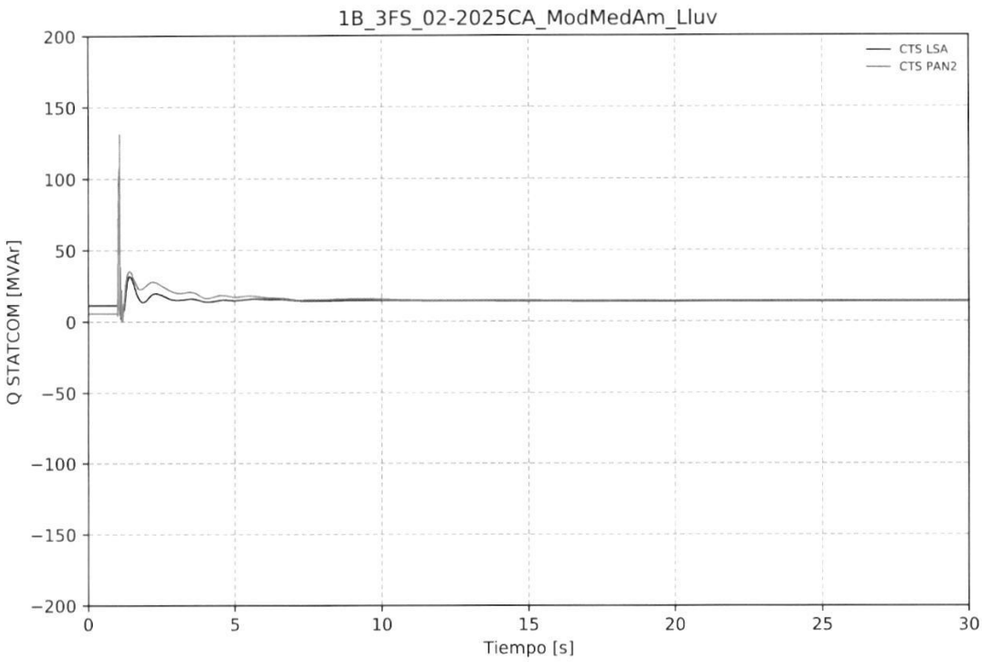
59.5
59.0
58.5
58.0
0
5
10
15
20
25
30
Tiempo [s]

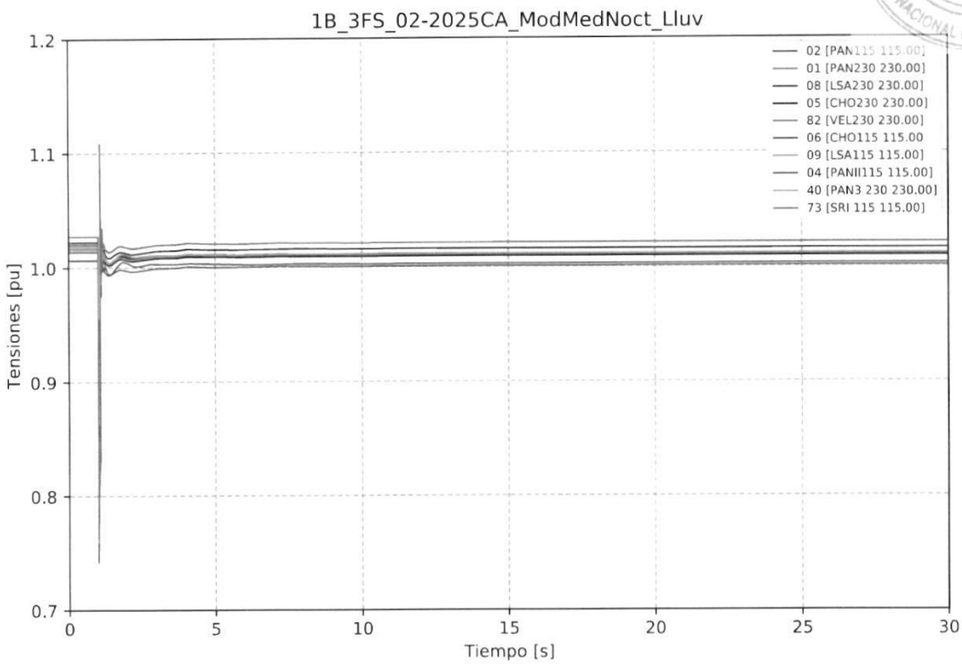

1B_3FS_02-2025CA_ModMedAm_Lluv
Importacion
Potencia Activa [NW]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30
Tiempo [s]

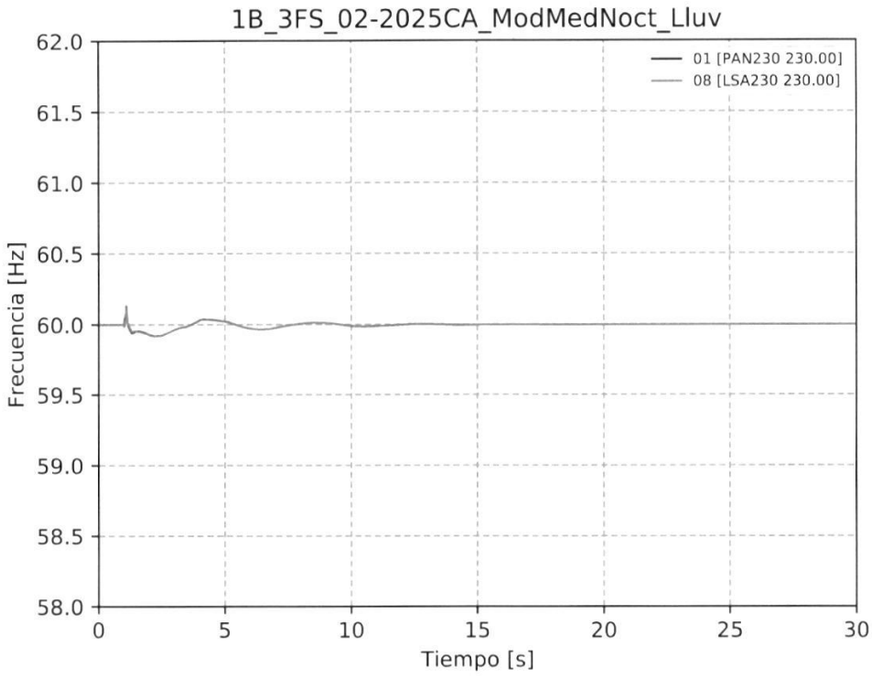
5627


1B_3FS_02-2025CA_ModMedAm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]


1B_3FS_02-2025CA_ModMedAm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

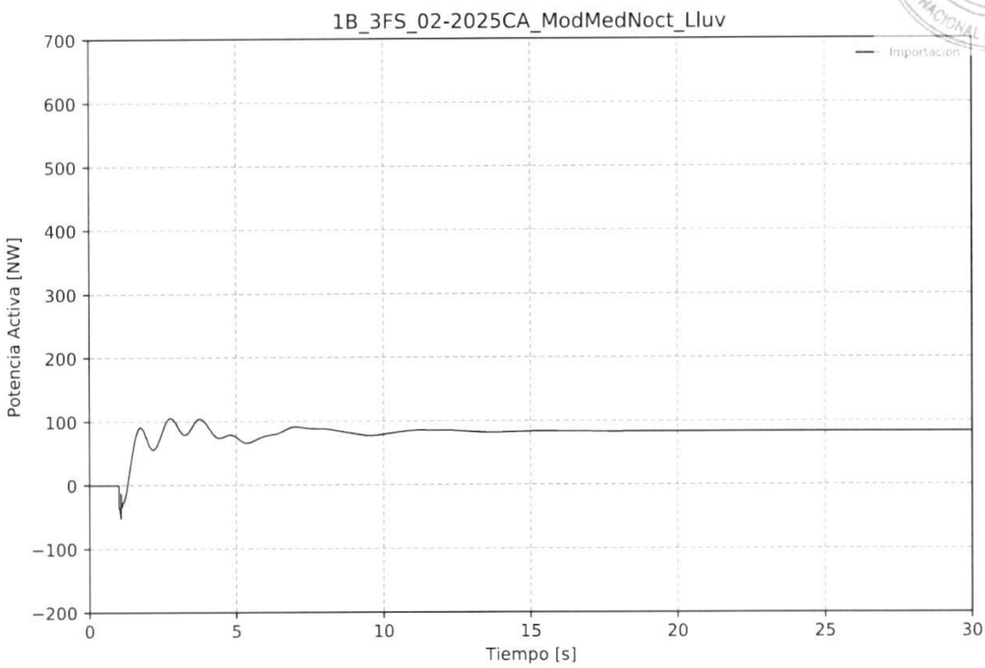
5628

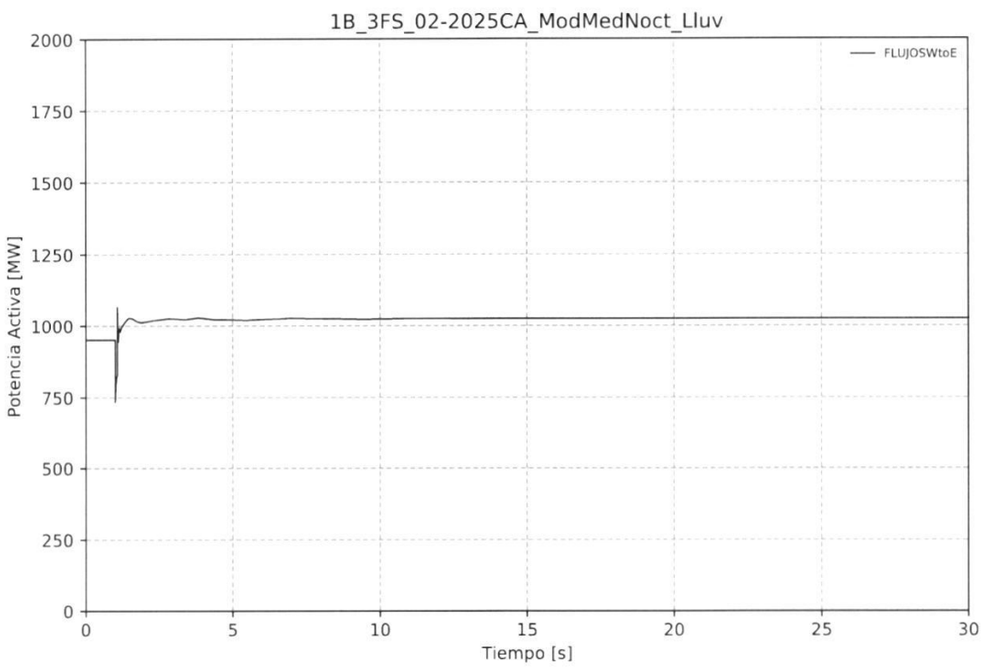

1B_3FS_02-2025CA_ModMedNoct_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]


1B_3FS_02-2025CA_ModMedNoct_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

REPUBLICA DE PANAMA
AUTORIDAD NACIONAL DE LOS SERVICIOS PUBLICOS

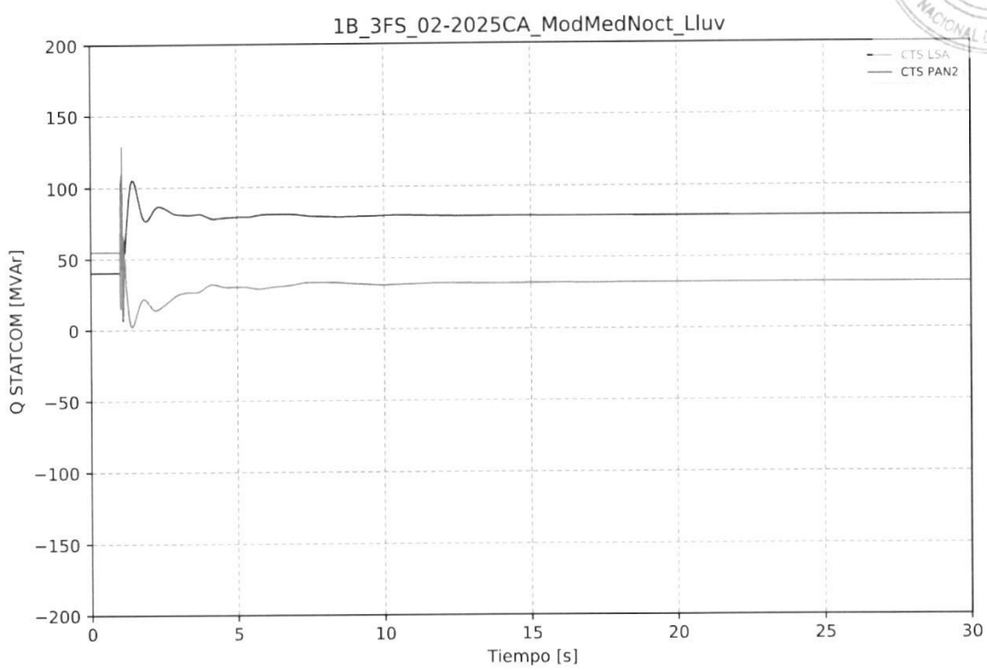
5629

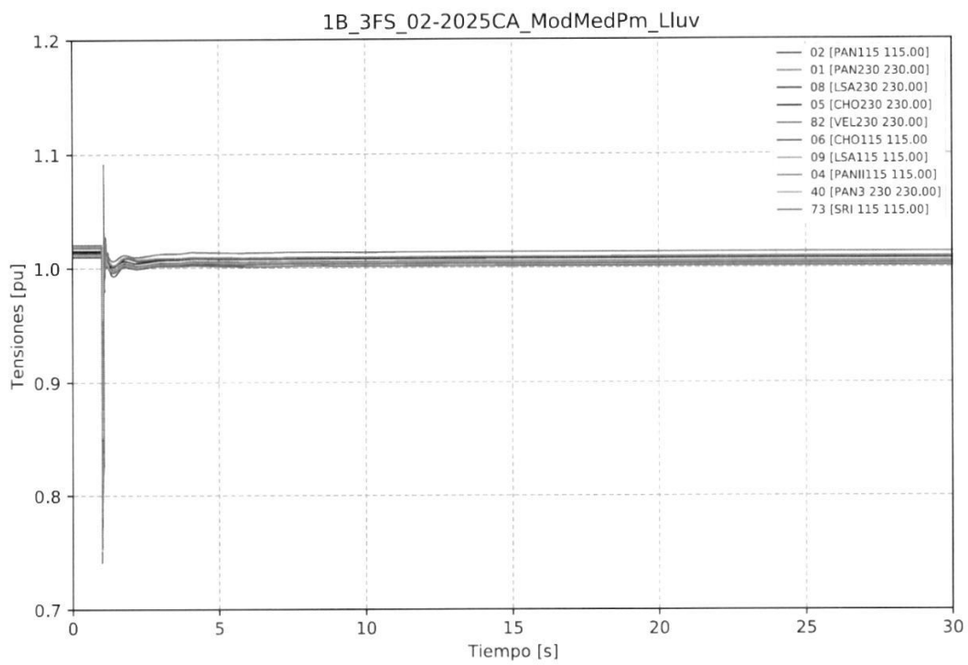




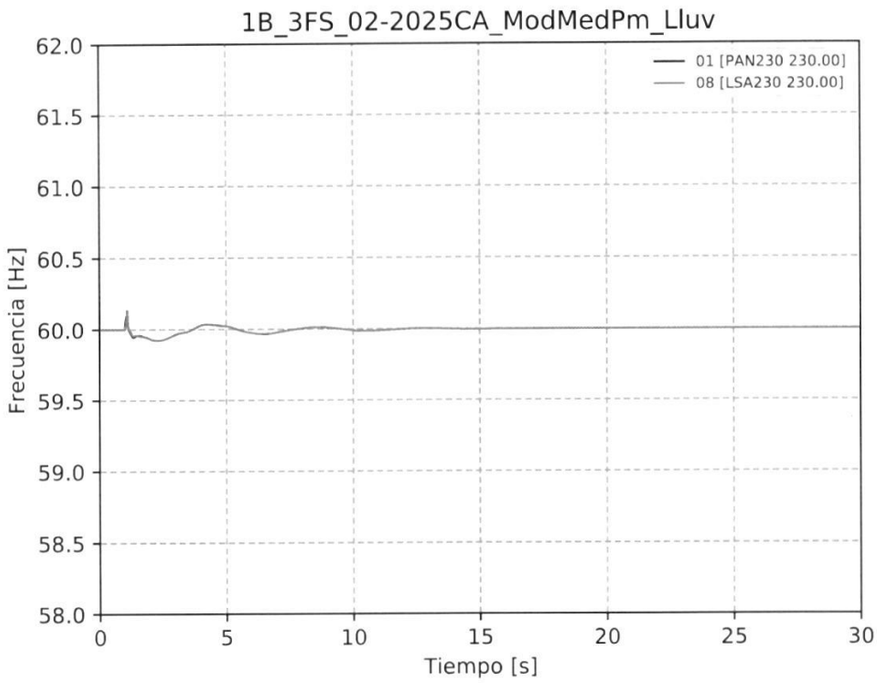
REPUBLICA DE PANAMA
AUTORIDAD NACIONAL DE LOS SERVICIOS PUBLICOS

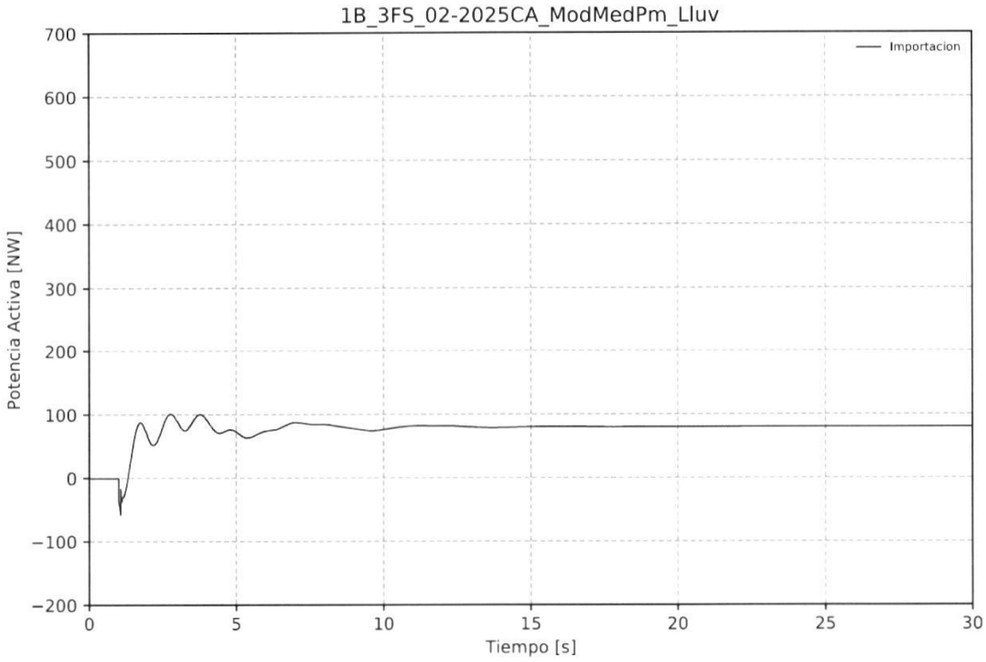
5630



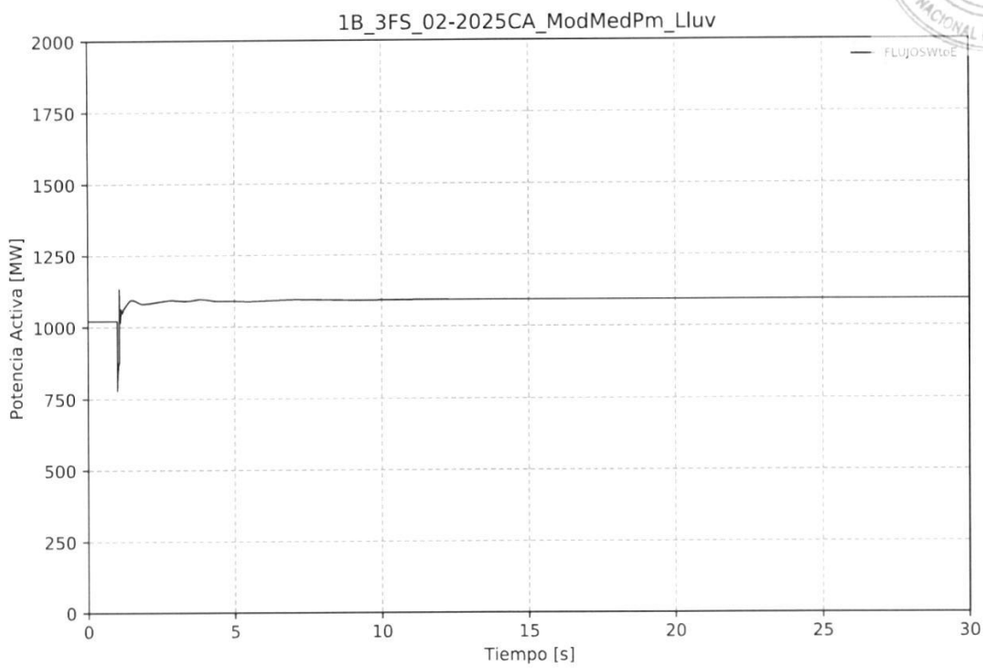


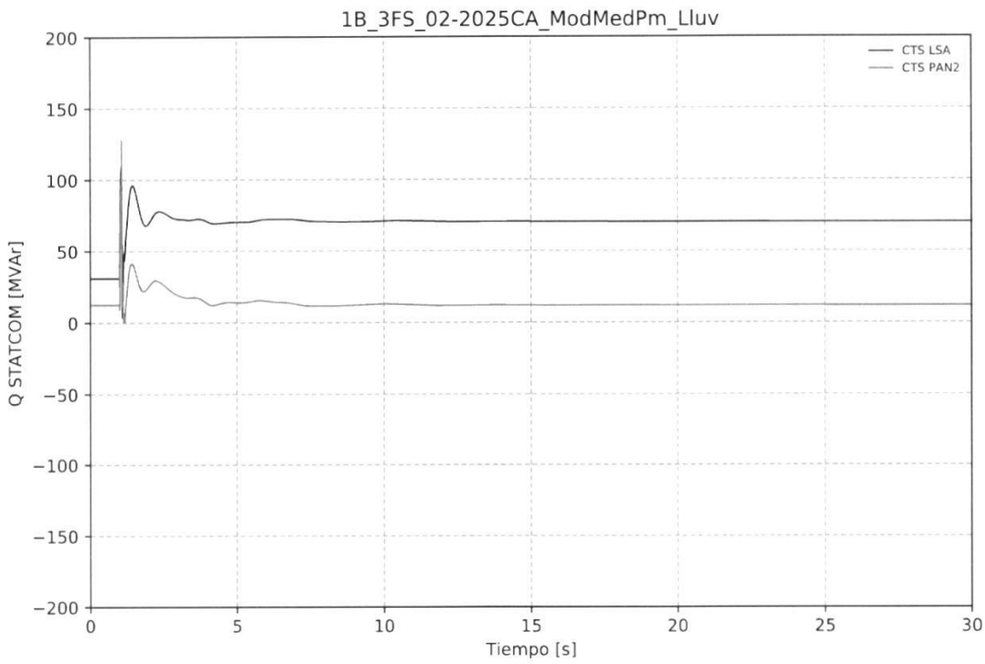
5631


1B_3FS_02-2025CA_ModMedPm_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
62.0
61.5
61.0
60.5
60.0
59.5
59.0
58.5
58.0
0
5
10
15
20
25
30
Tiempo [s]

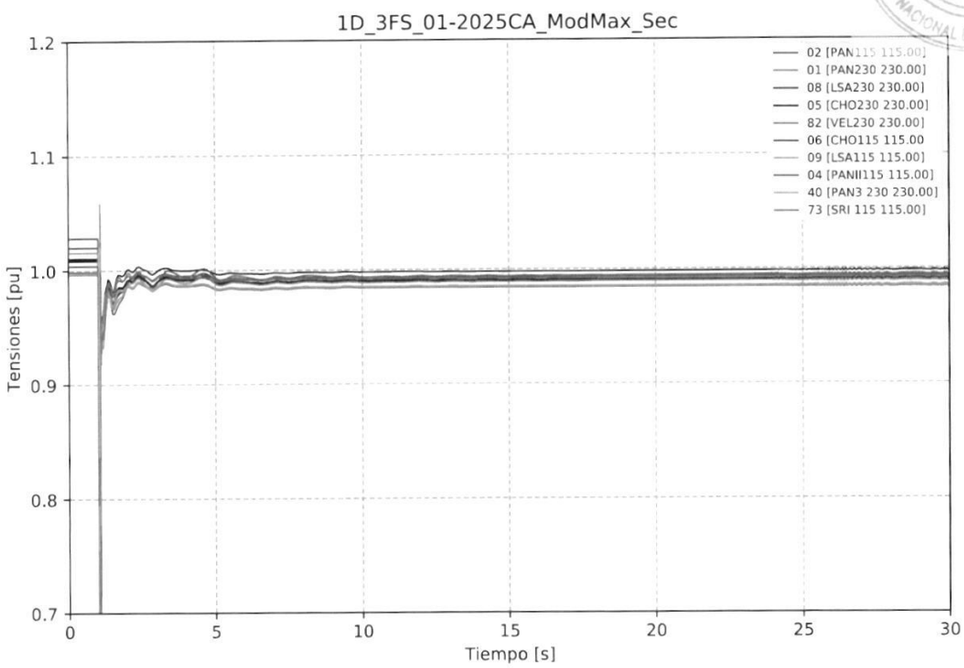

1B_3FS_02-2025CA_ModMedPm_Lluv
Importacion
Potencia Activa [NW]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30
Tiempo [s]

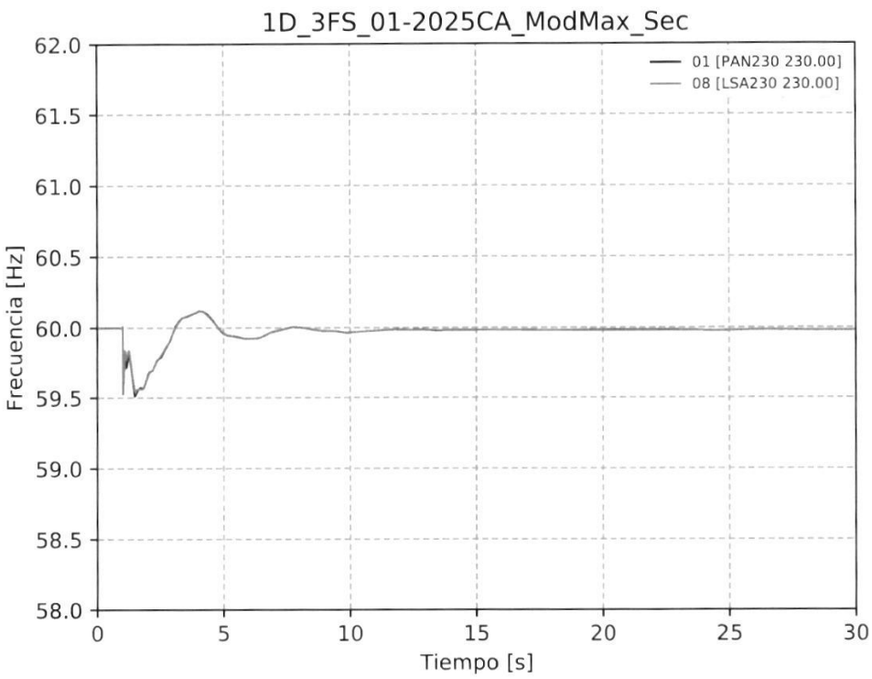
5632


1B_3FS_02-2025CA_ModMedPm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

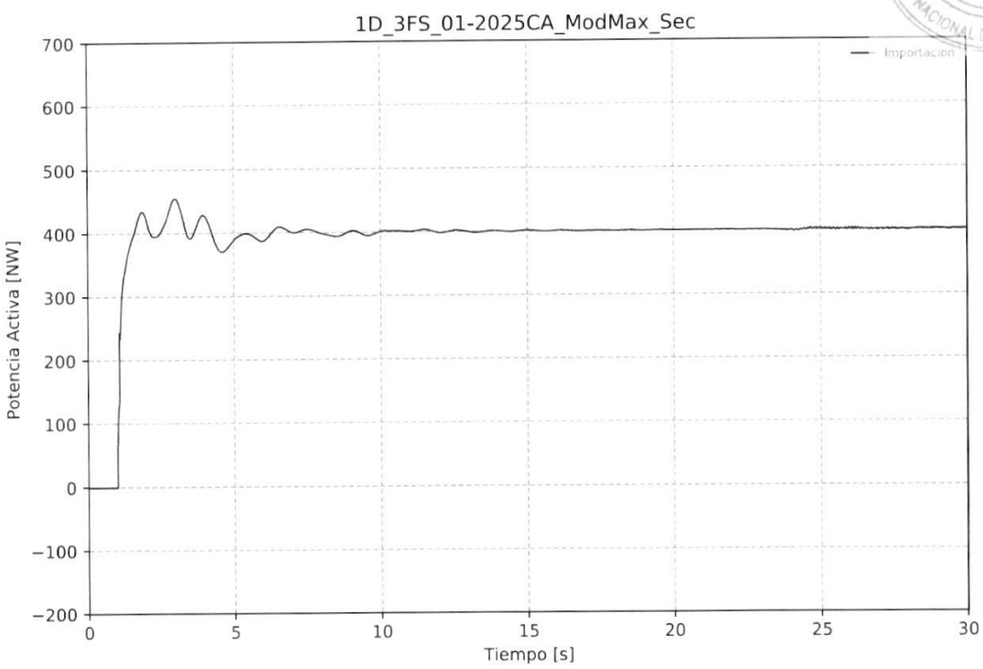

1B_3FS_02-2025CA_ModMedPm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

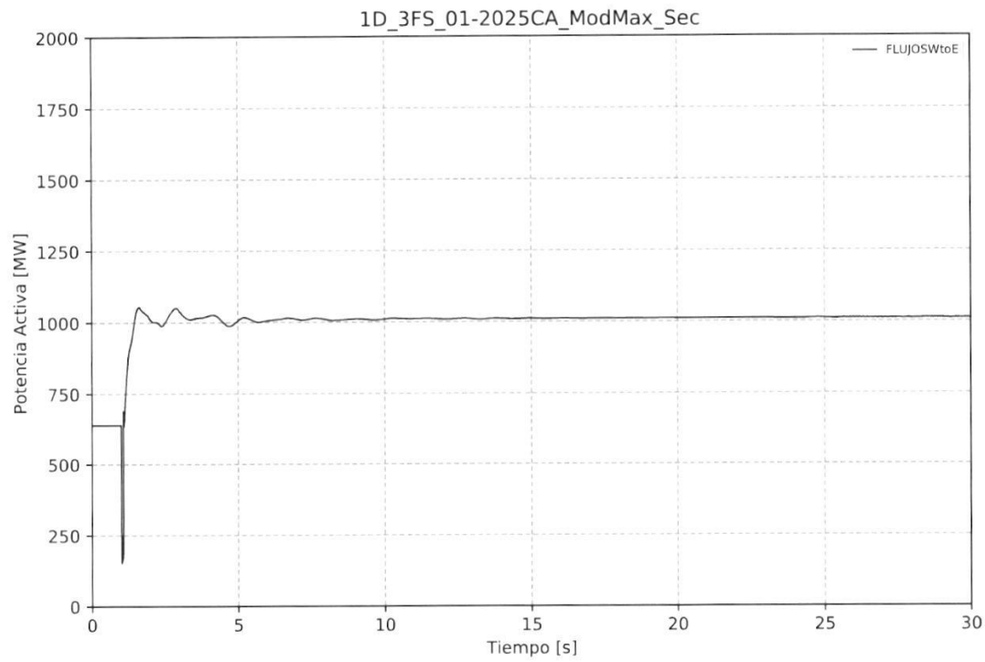
5633


1D_3FS_01-2025CA_ModMax_Sec
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

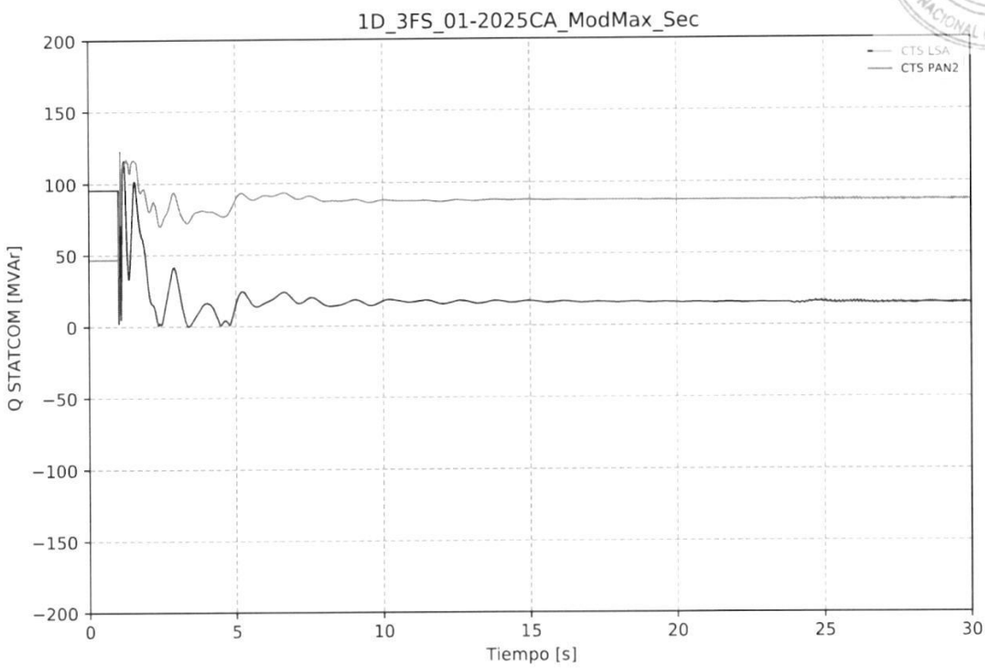

1D_3FS_01-2025CA_ModMax_Sec
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

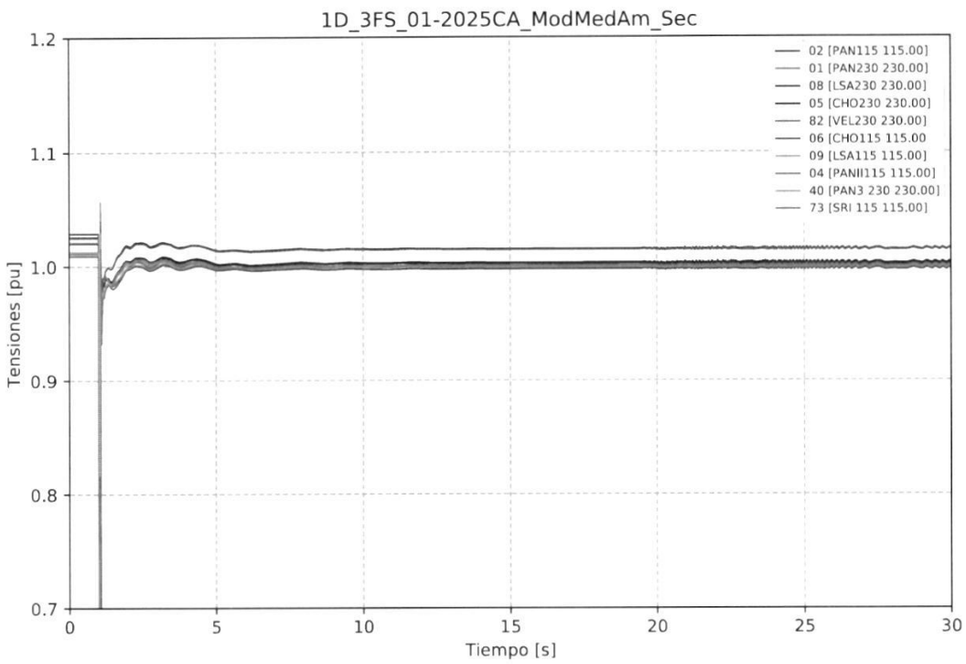
5634


1D_3FS_01-2025CA_ModMax_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30

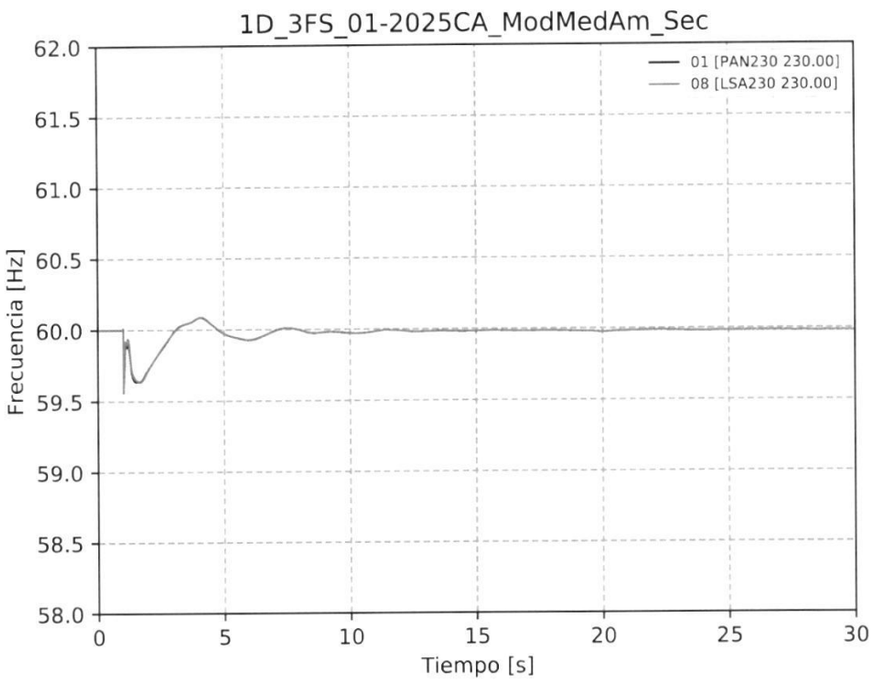

1D_3FS_01-2025CA_ModMax_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30

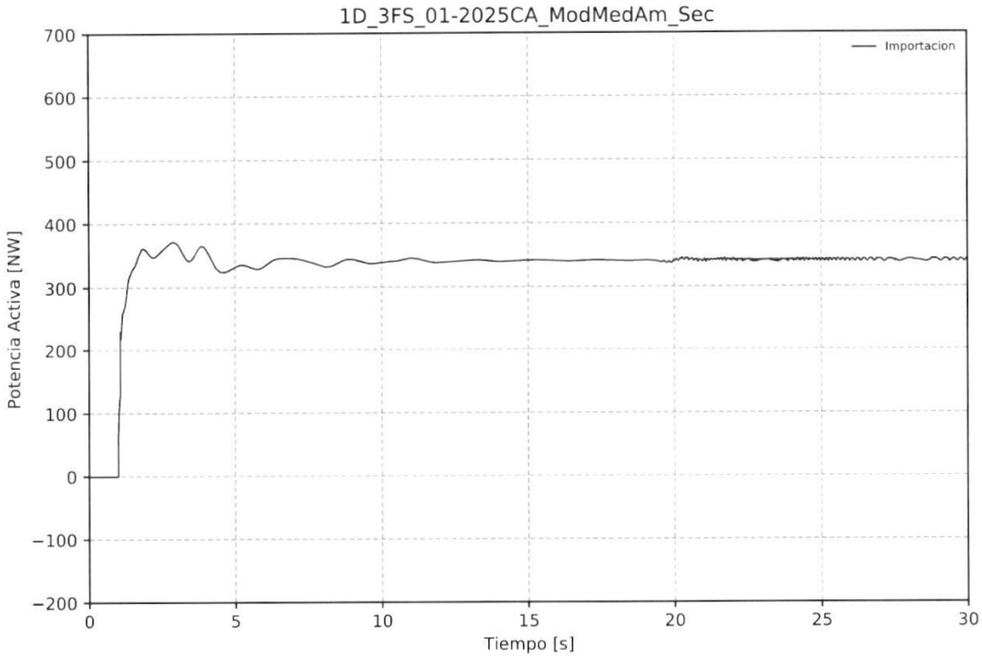
5635


1D_3FS_01-2025CA_ModMax_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

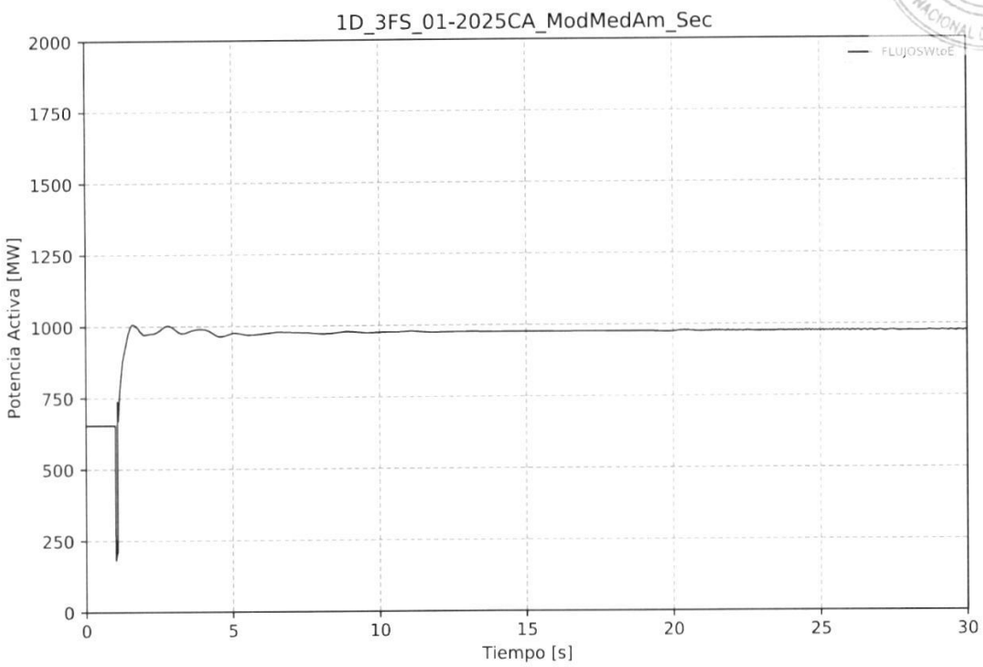

1D_3FS_01-2025CA_ModMedAm_Sec
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

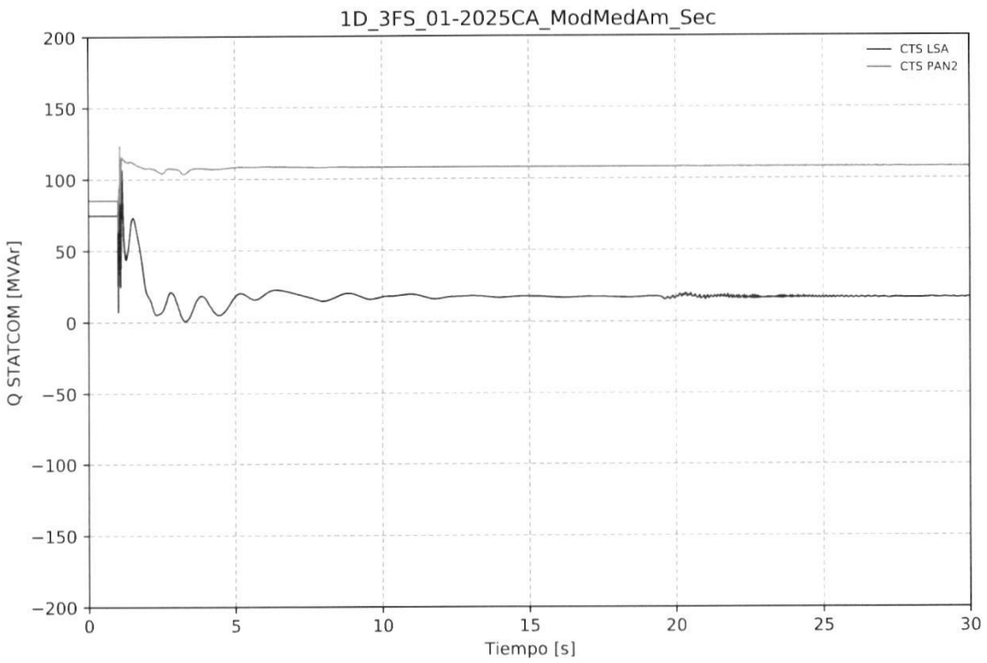
5636


1D_3FS_01-2025CA_ModMedAm_Sec
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

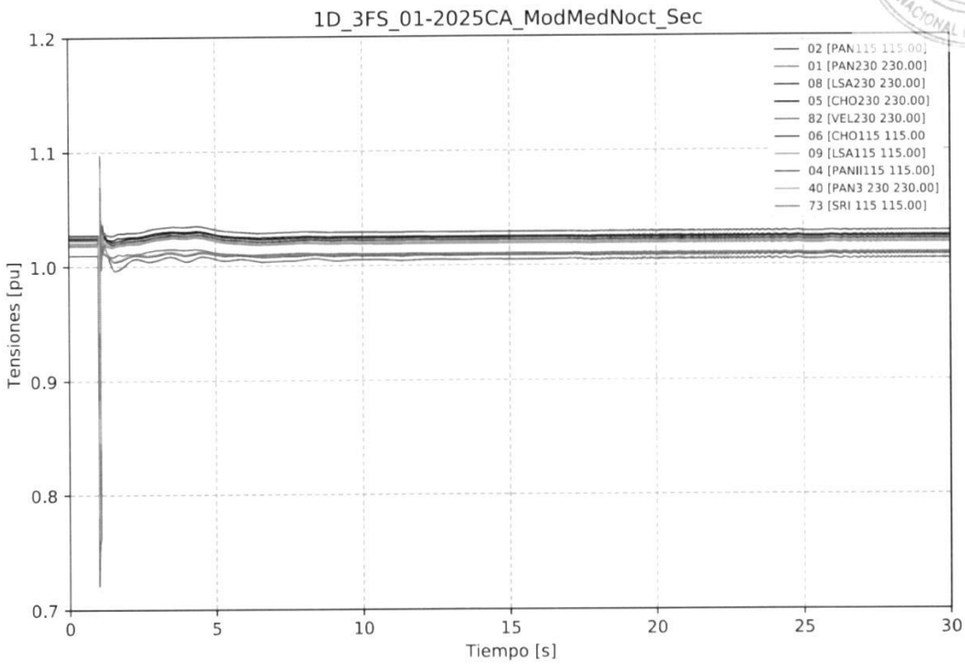

1D_3FS_01-2025CA_ModMedAm_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]

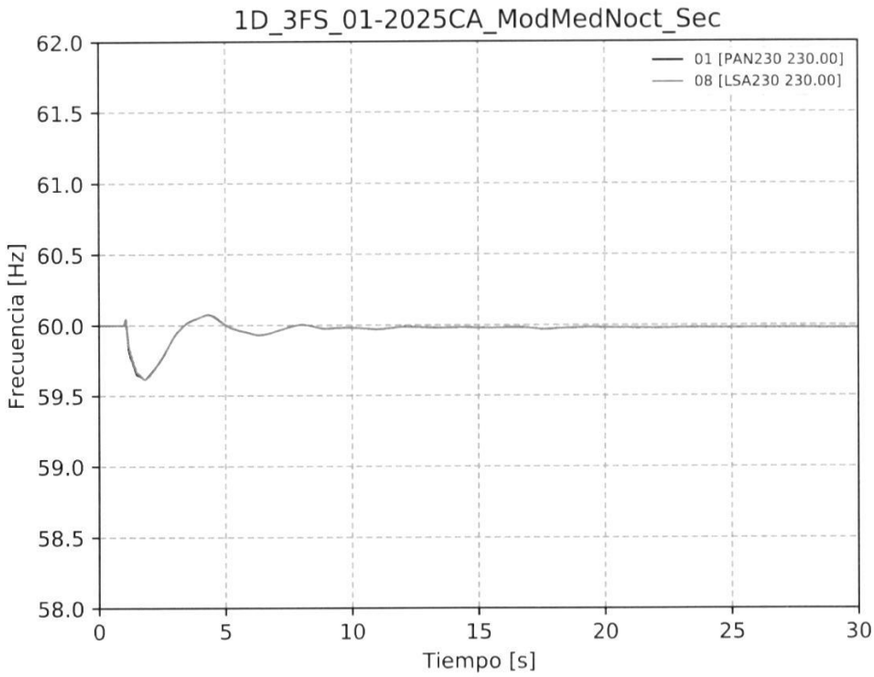
5637


1D_3FS_01-2025CA_ModMedAm_Sec
FLUJOSW:oE
Potencia Activa [MW]
Tiempo [s]

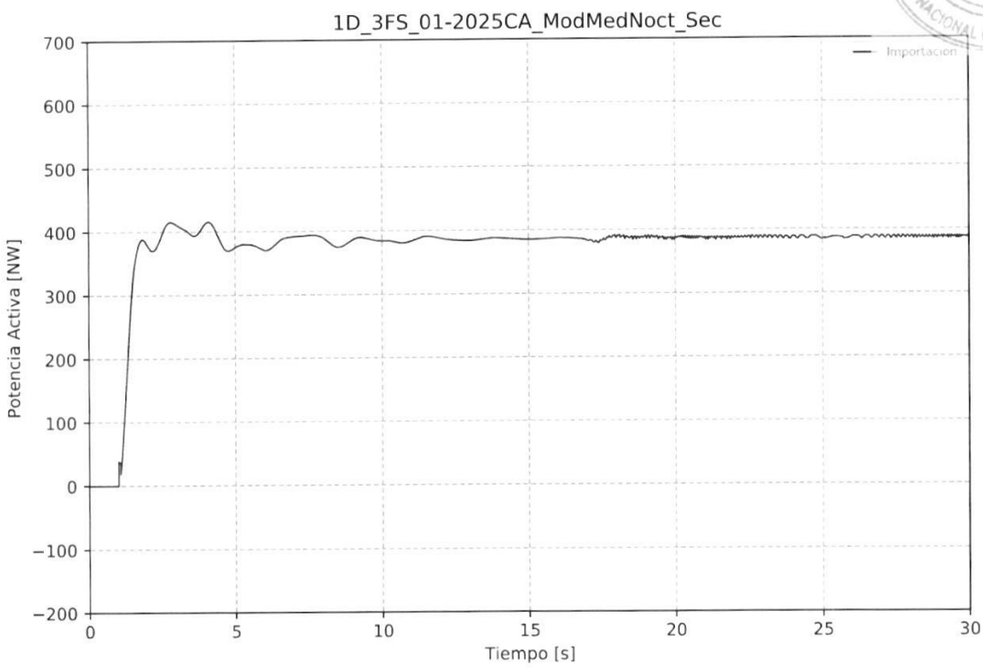

1D_3FS_01-2025CA_ModMedAm_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

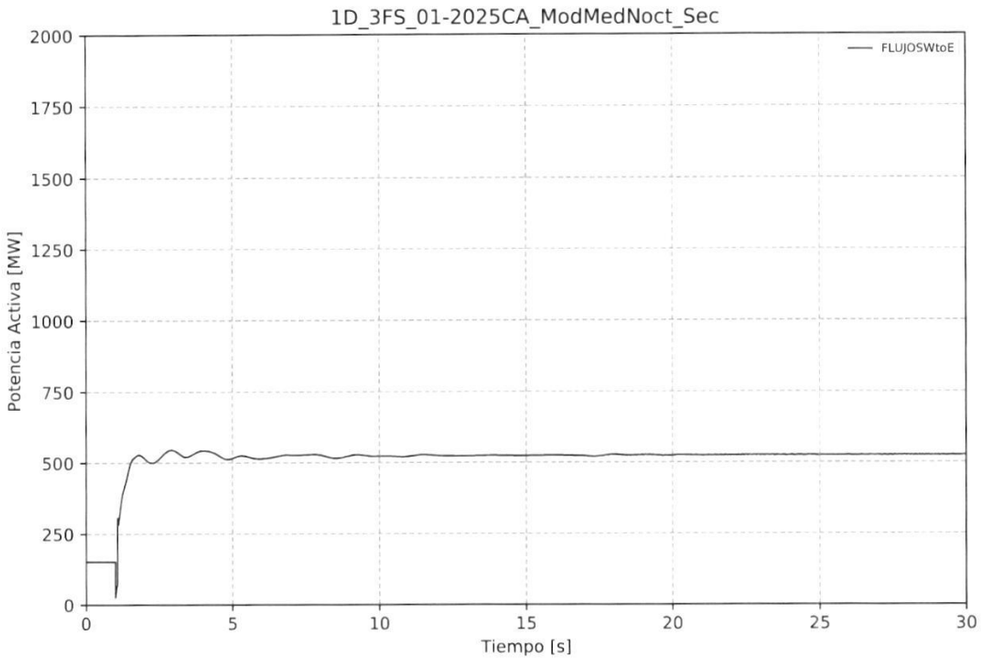
5638


1D_3FS_01-2025CA_ModMedNoct_Sec
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

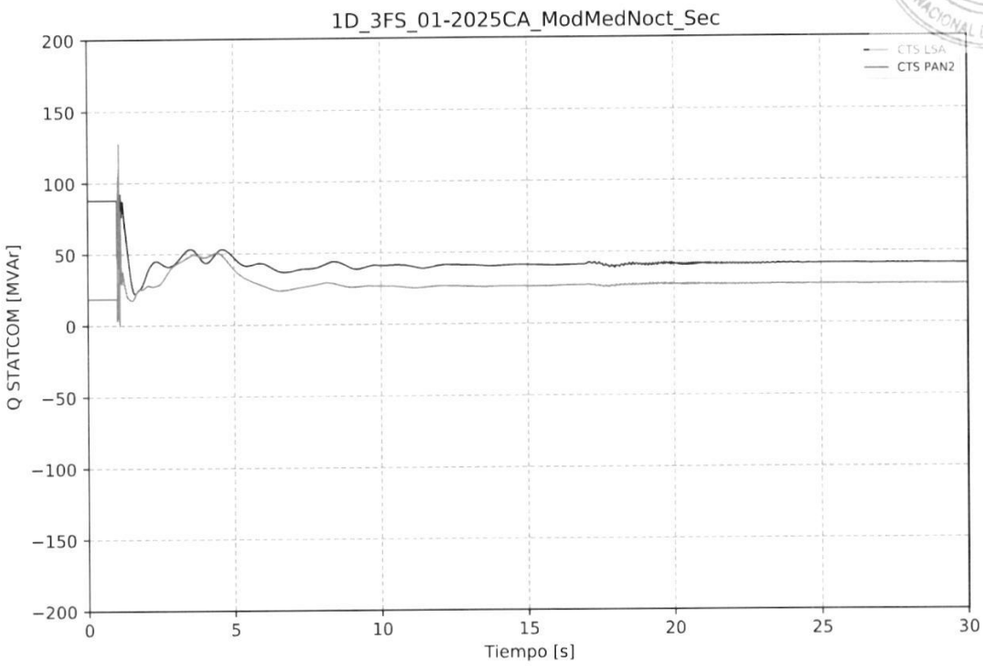

1D_3FS_01-2025CA_ModMedNoct_Sec
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

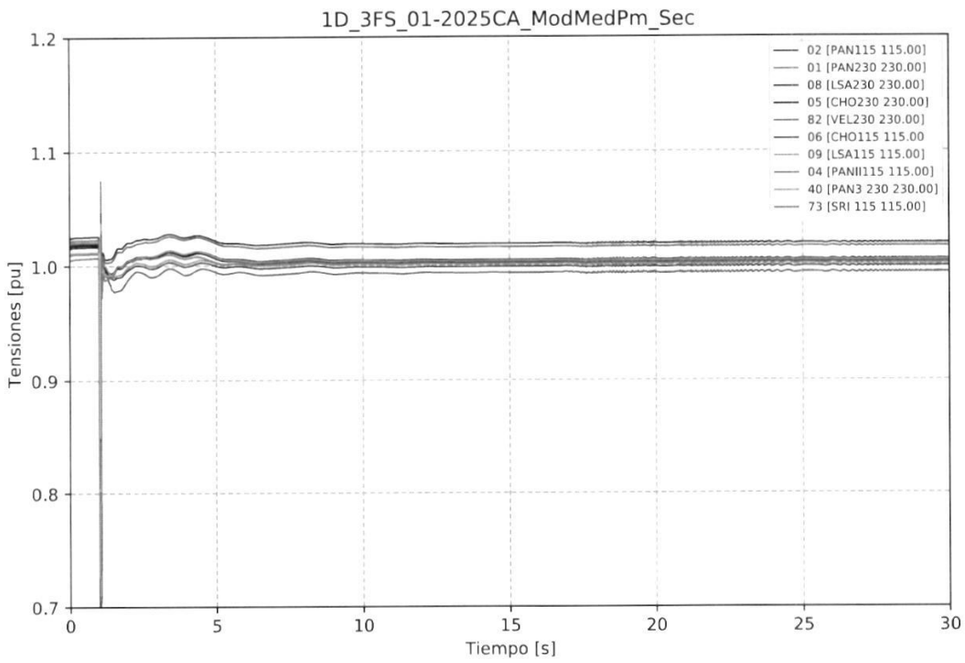
5639


1D_3FS_01-2025CA_ModMedNoct_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]

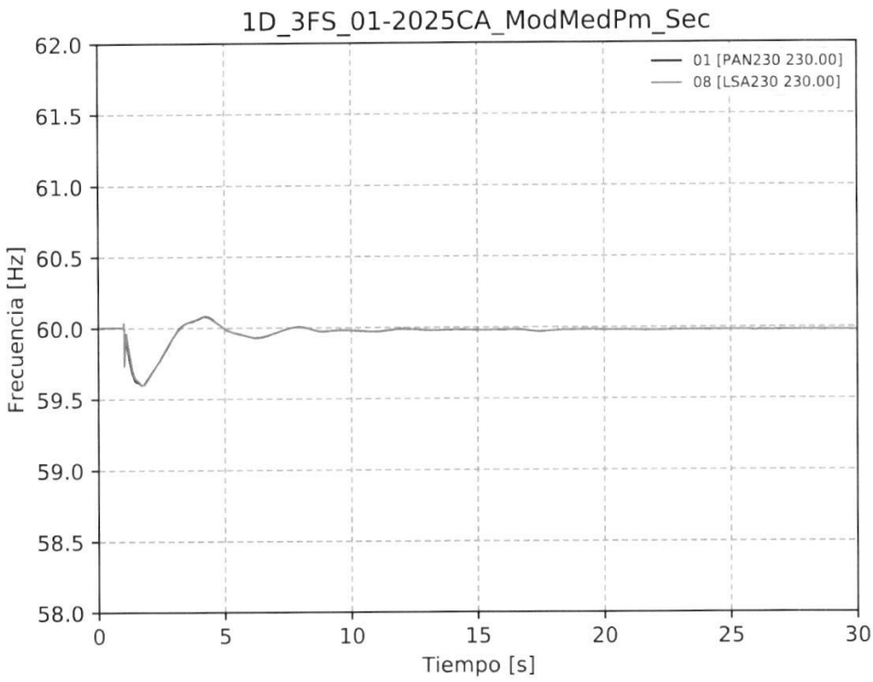

1D_3FS_01-2025CA_ModMedNoct_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

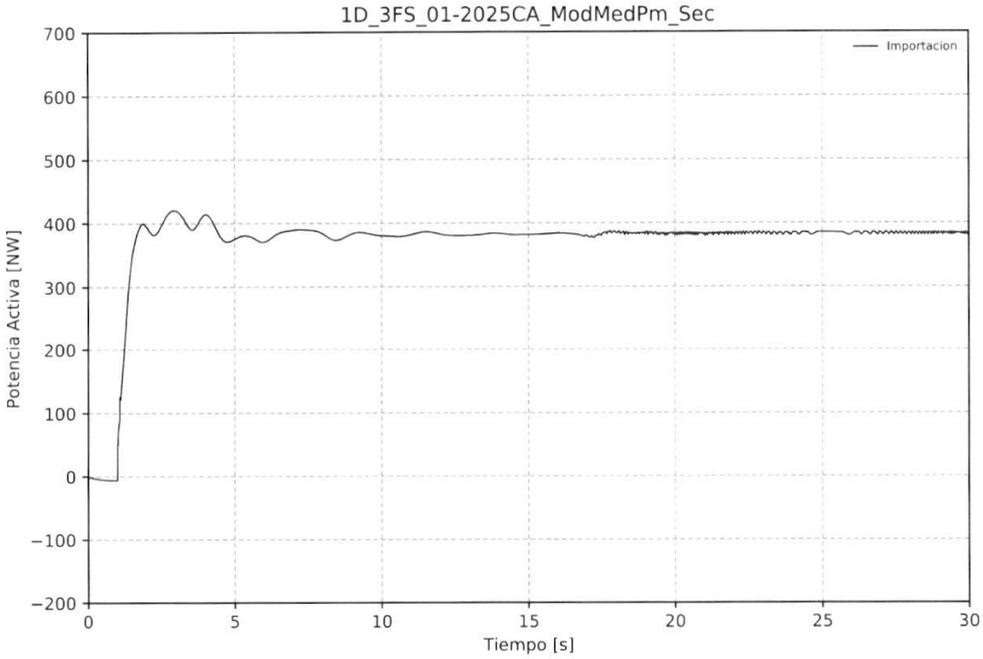
5640


1D_3FS_01-2025CA_ModMedNoct_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

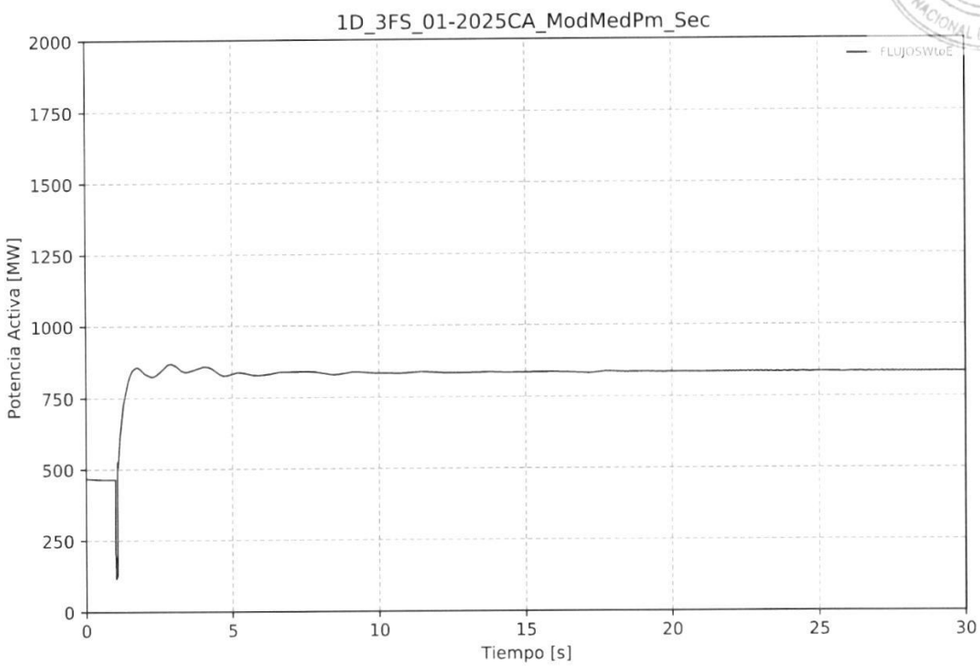

1D_3FS_01-2025CA_ModMedPm_Sec
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

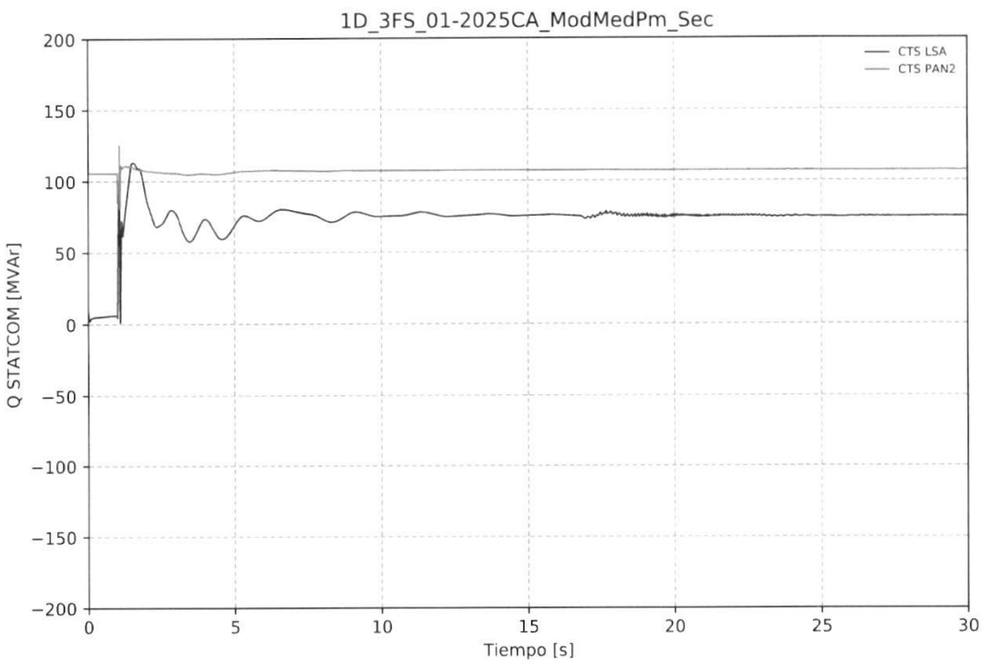
5641


1D_3FS_01-2025CA_ModMedPm_Sec
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

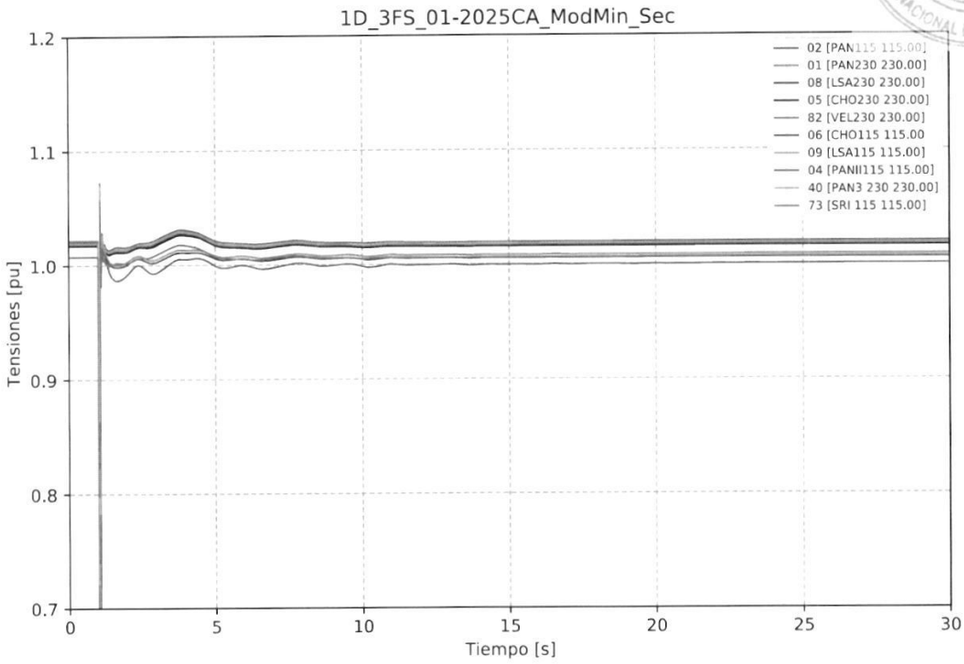

1D_3FS_01-2025CA_ModMedPm_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]

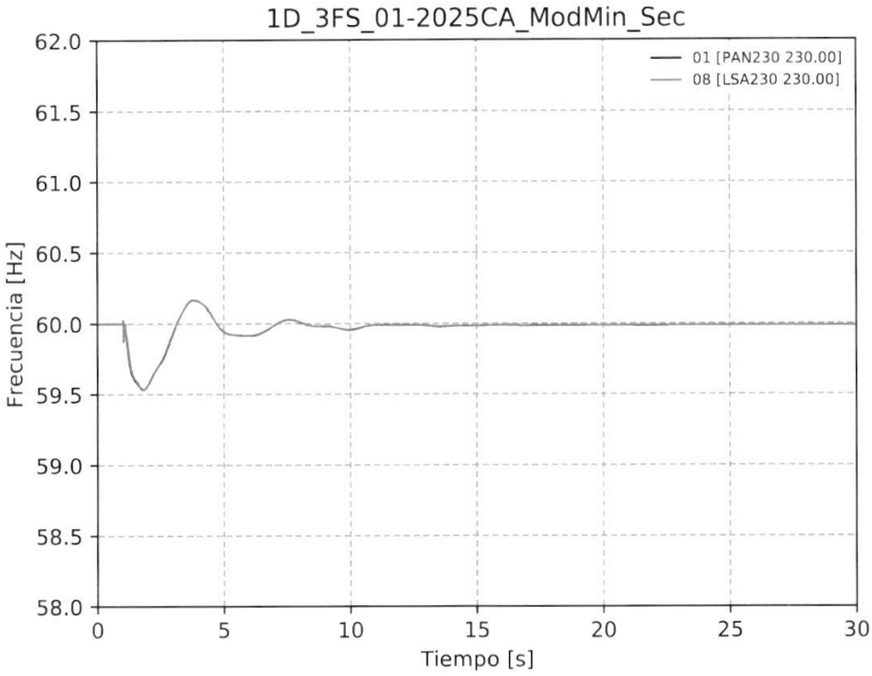
5642


1D_3FS_01-2025CA_ModMedPm_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]


1D_3FS_01-2025CA_ModMedPm_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

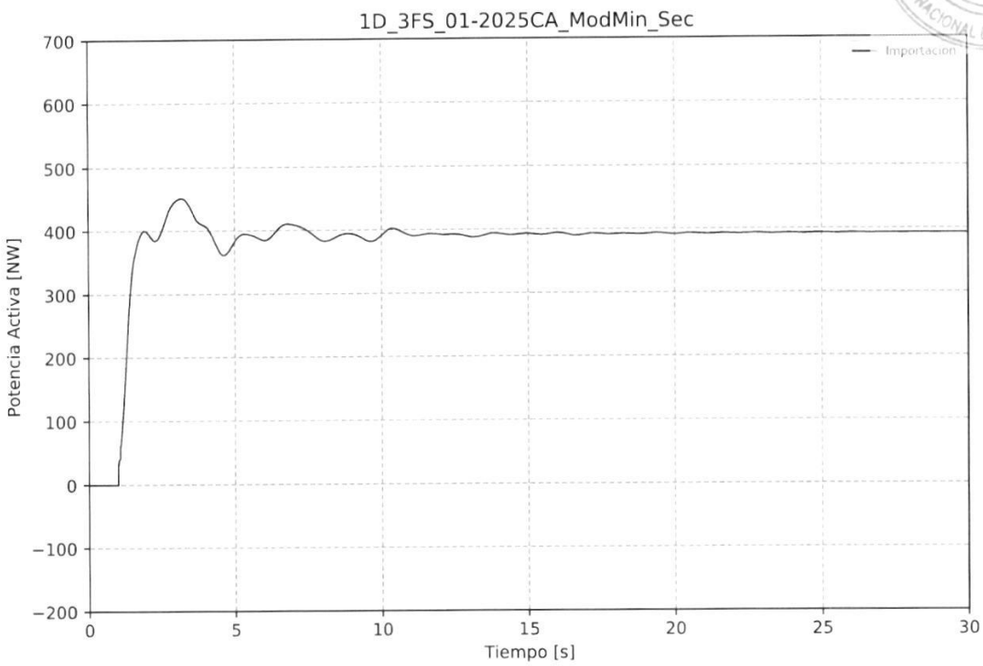
5643

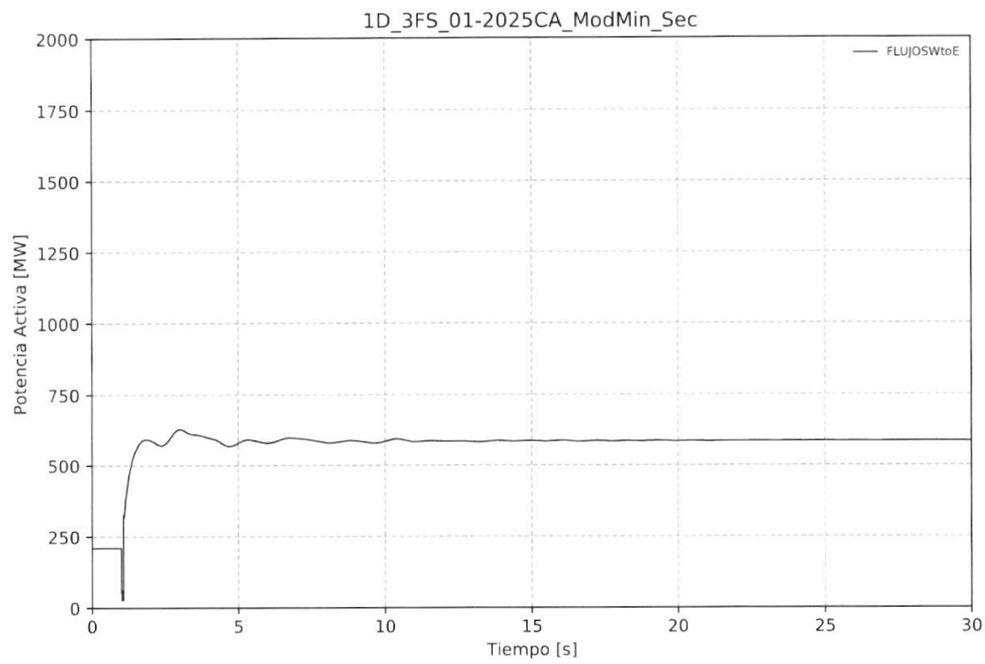

1D_3FS_01-2025CA_ModMin_Sec
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]


1D_3FS_01-2025CA_ModMin_Sec
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

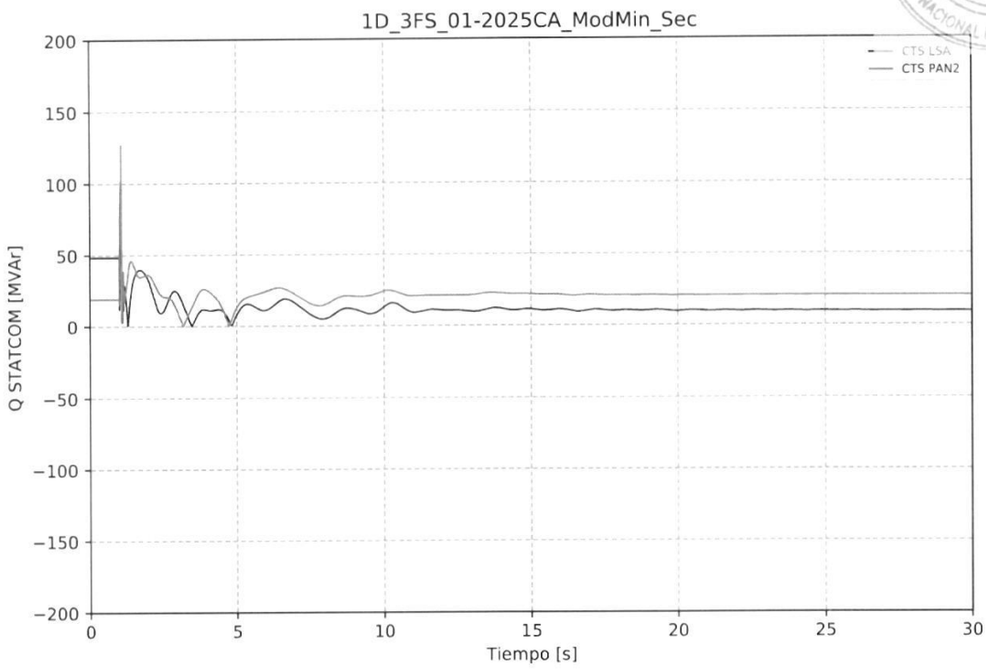
REPUBLICA DE PANAMA
AUTORIDAD NACIONAL DE LOS SERVICIOS PUBLICOS

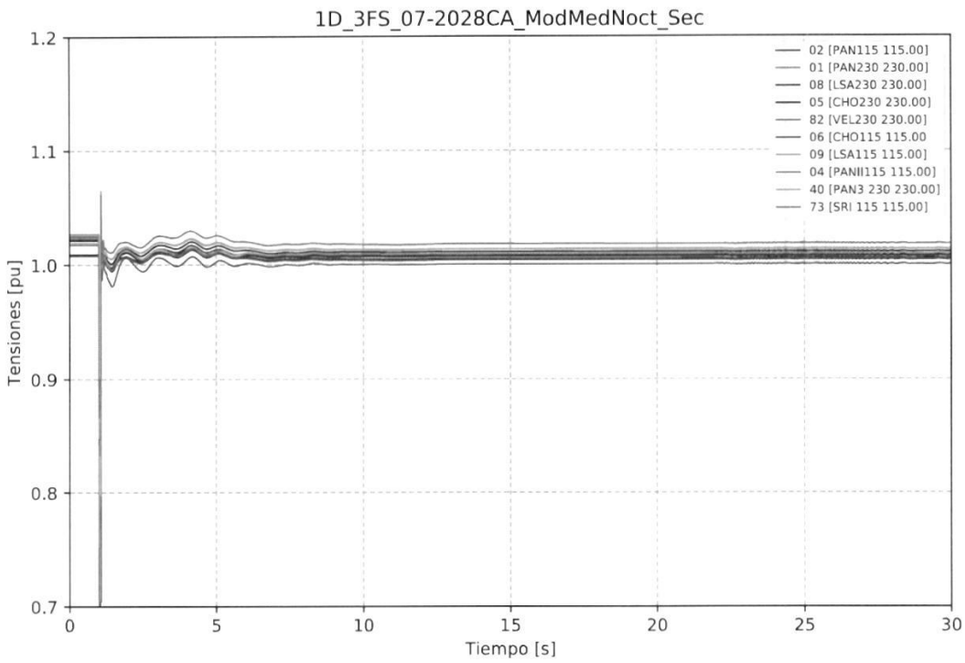
5644



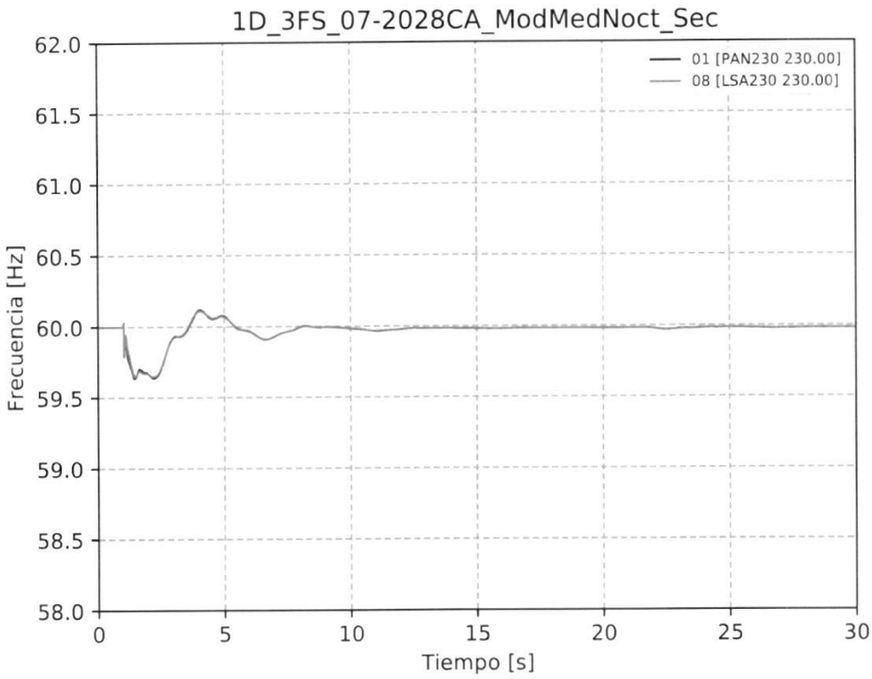


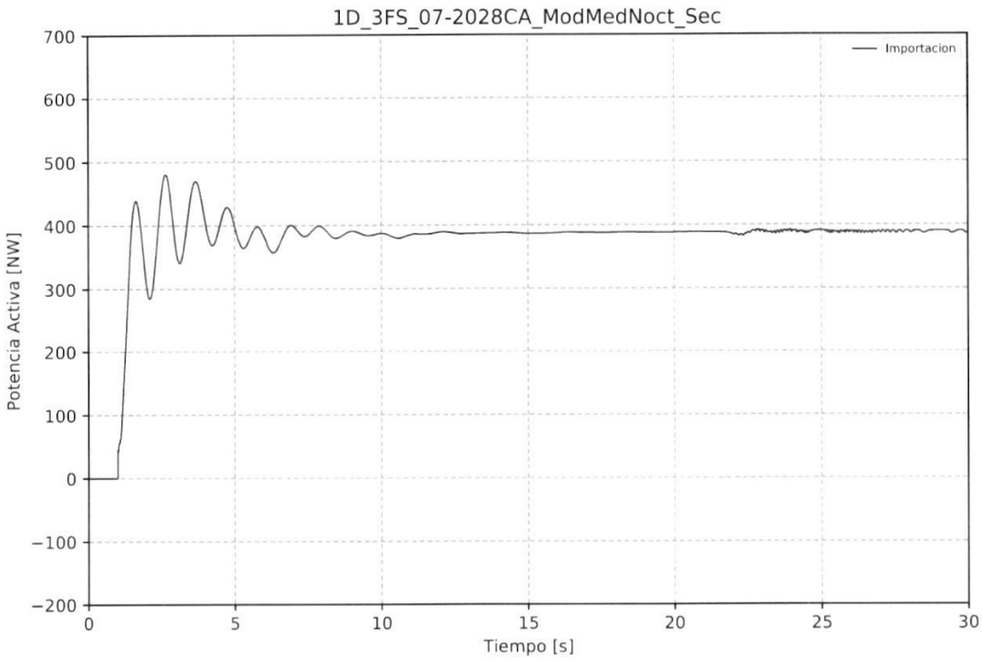
5645


1D_3FS_01-2025CA_ModMin_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

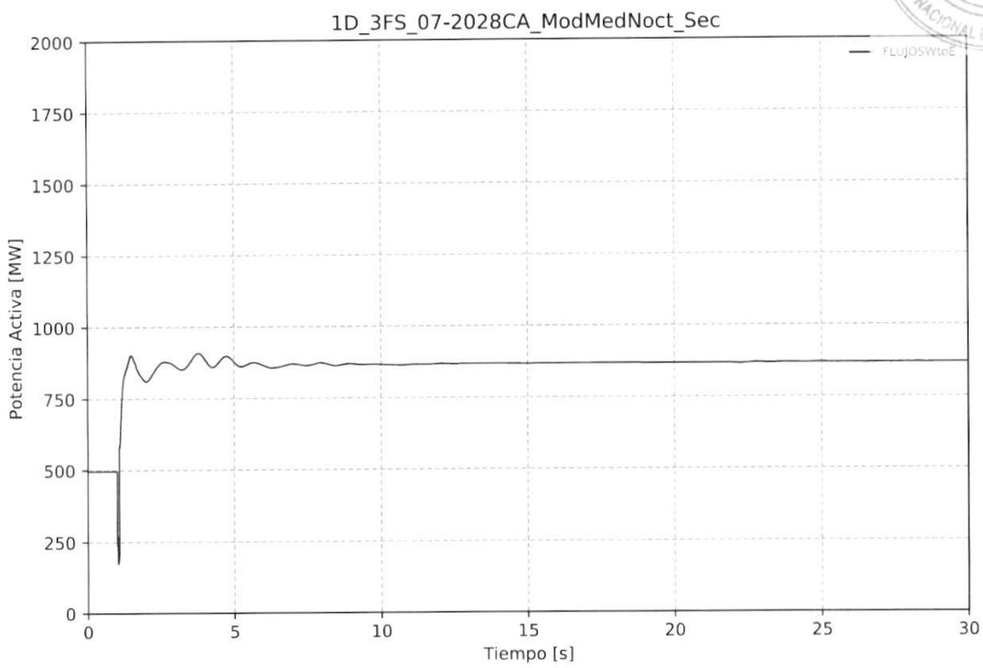

1D_3FS_07-2028CA_ModMedNoct_Sec
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

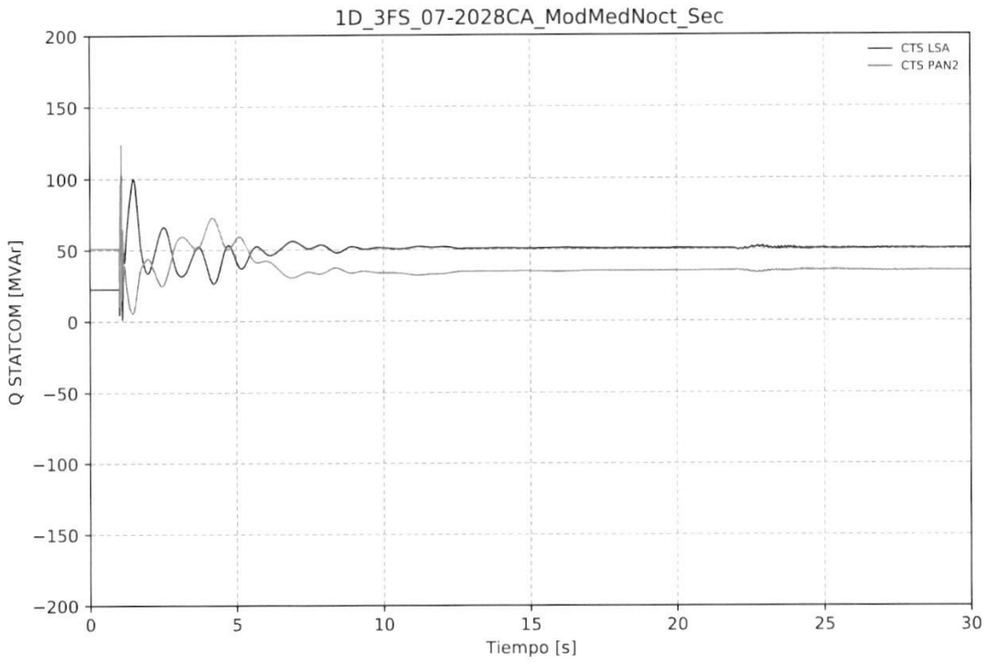
5646


1D_3FS_07-2028CA_ModMedNoct_Sec
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

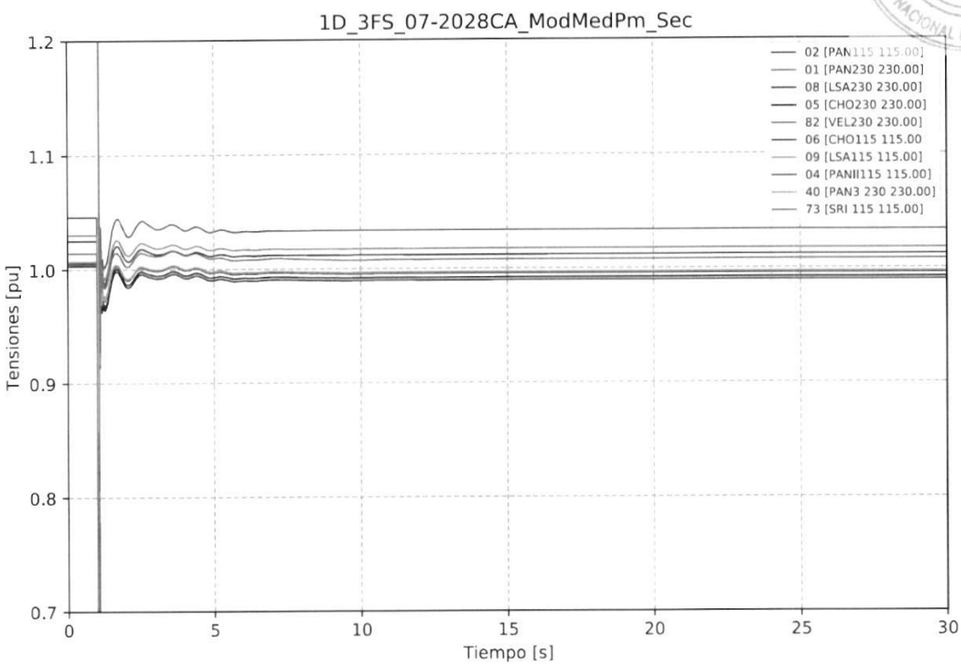

1D_3FS_07-2028CA_ModMedNoct_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]

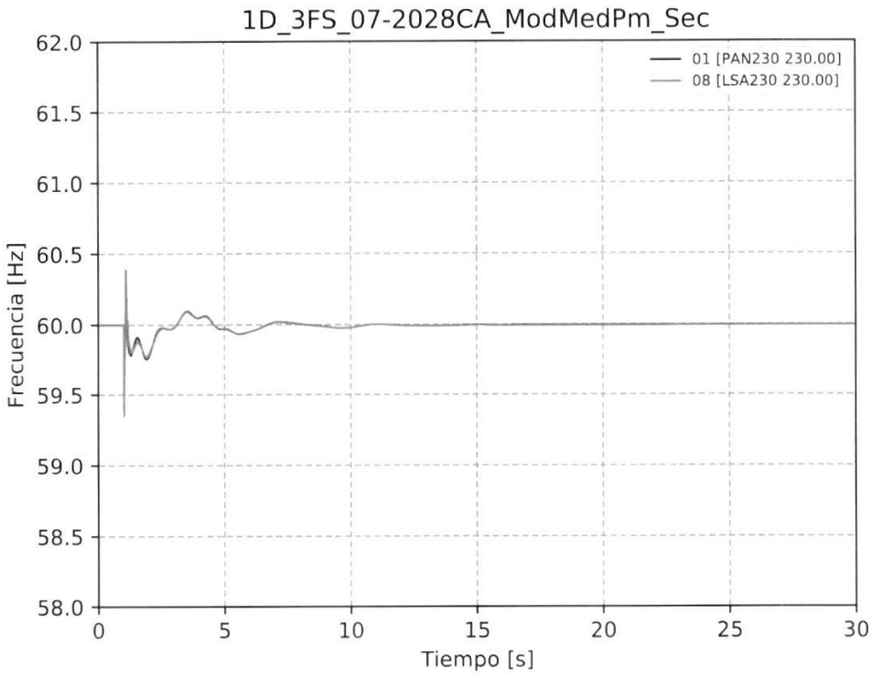
5647


1D_3FS_07-2028CA_ModMedNoct_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

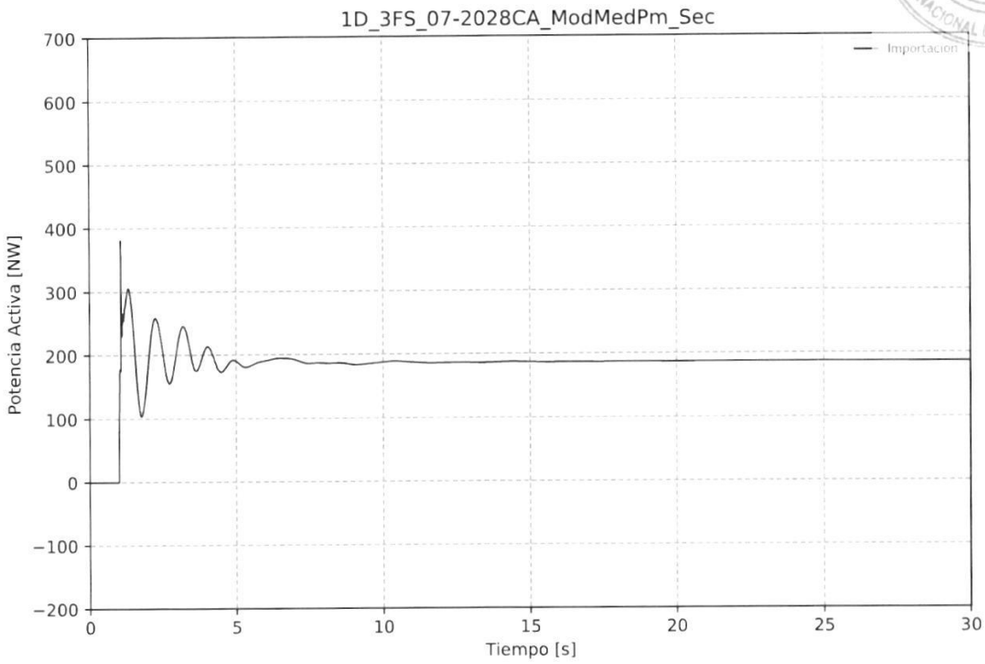

1D_3FS_07-2028CA_ModMedNoct_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

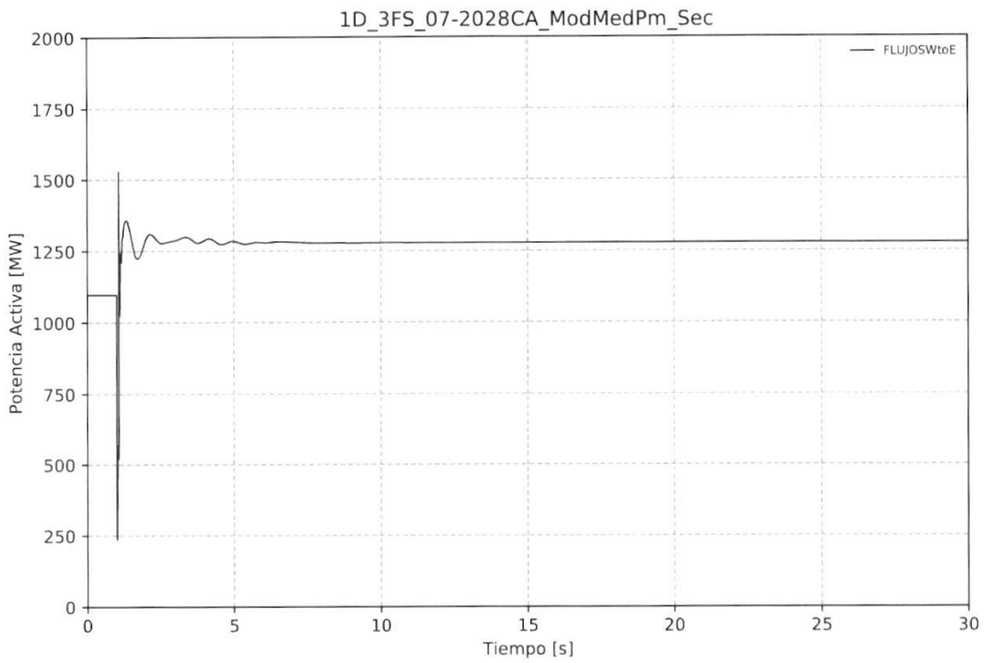
5648


1D_3FS_07-2028CA_ModMedPm_Sec
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

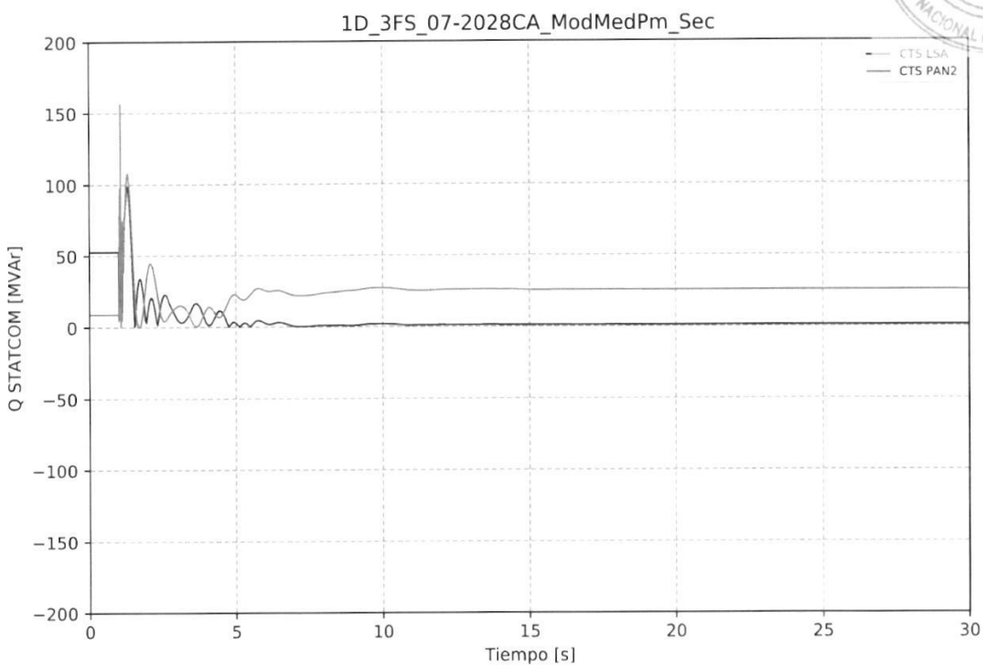

1D_3FS_07-2028CA_ModMedPm_Sec
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

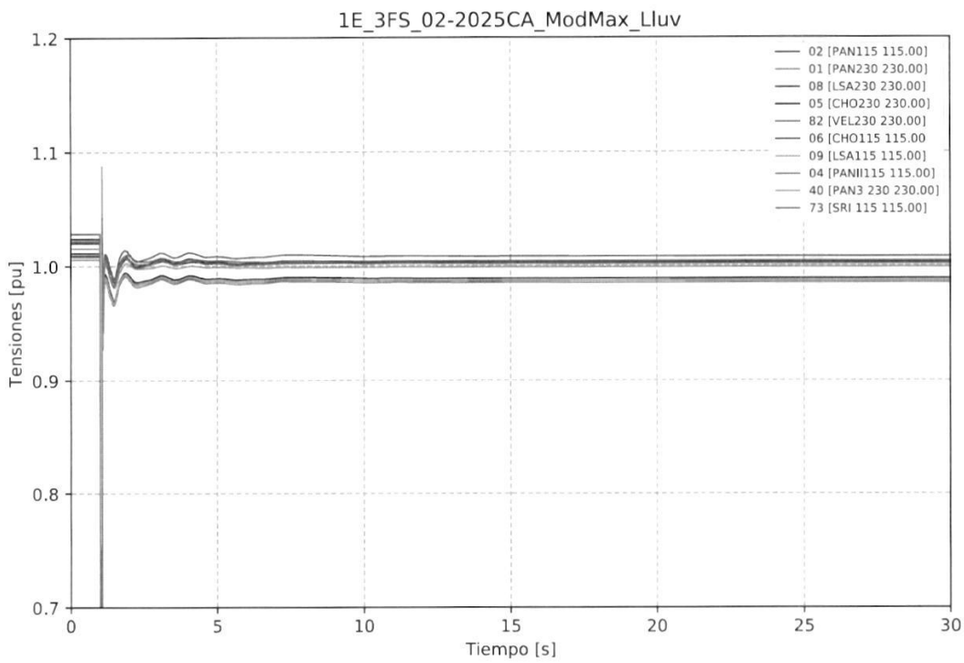
5649


1D_3FS_07-2028CA_ModMedPm_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30

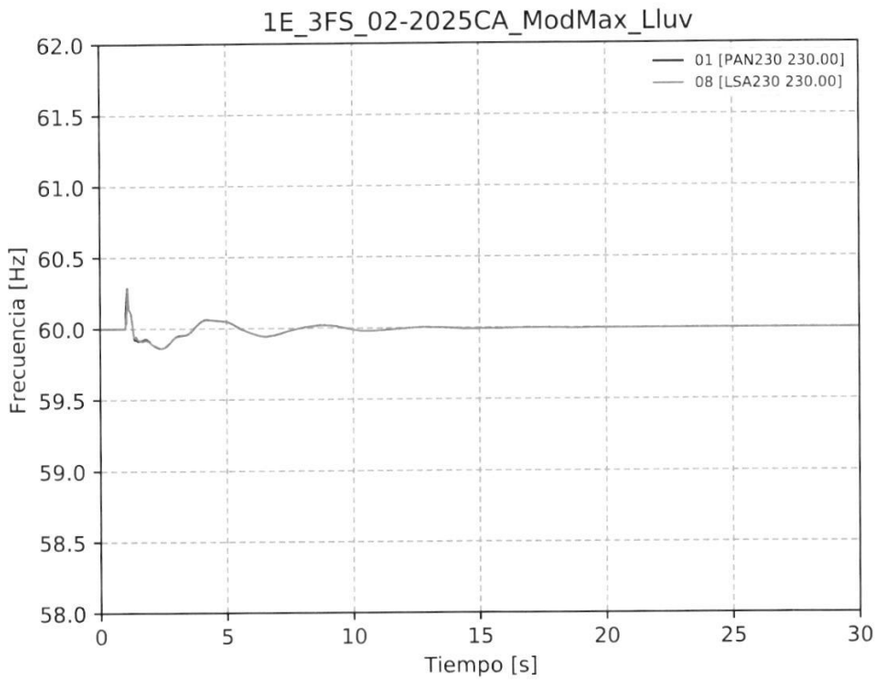

1D_3FS_07-2028CA_ModMedPm_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30

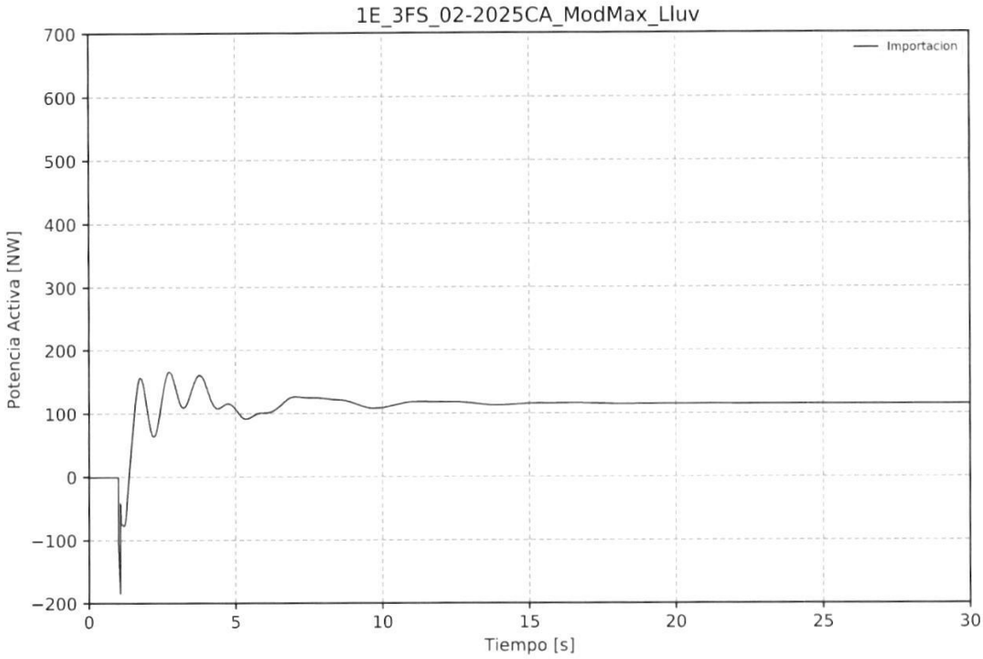
5650


1D_3FS_07-2028CA_ModMedPm_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

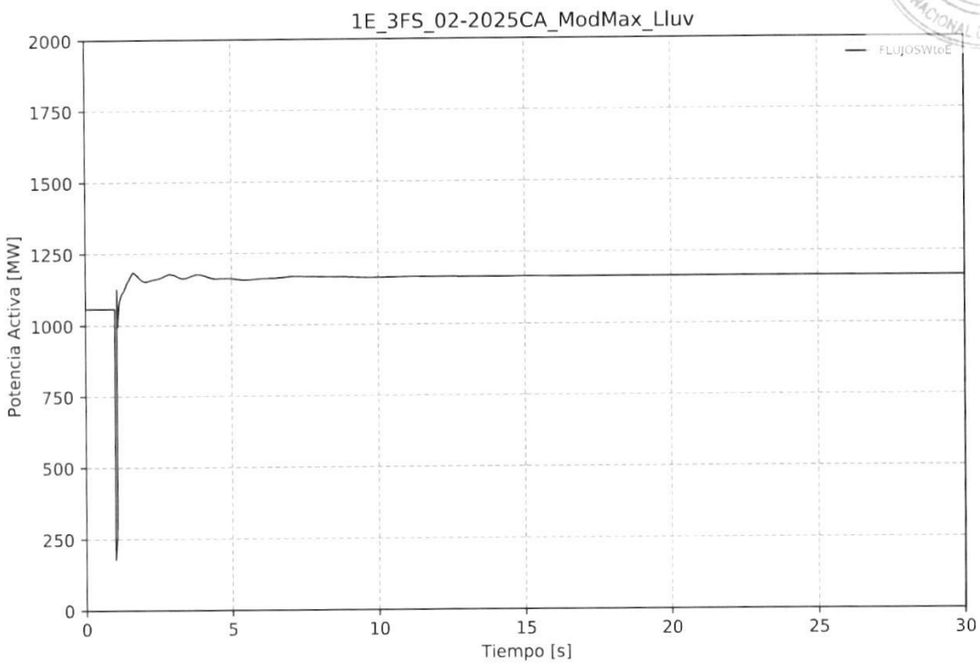

1E_3FS_02-2025CA_ModMax_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

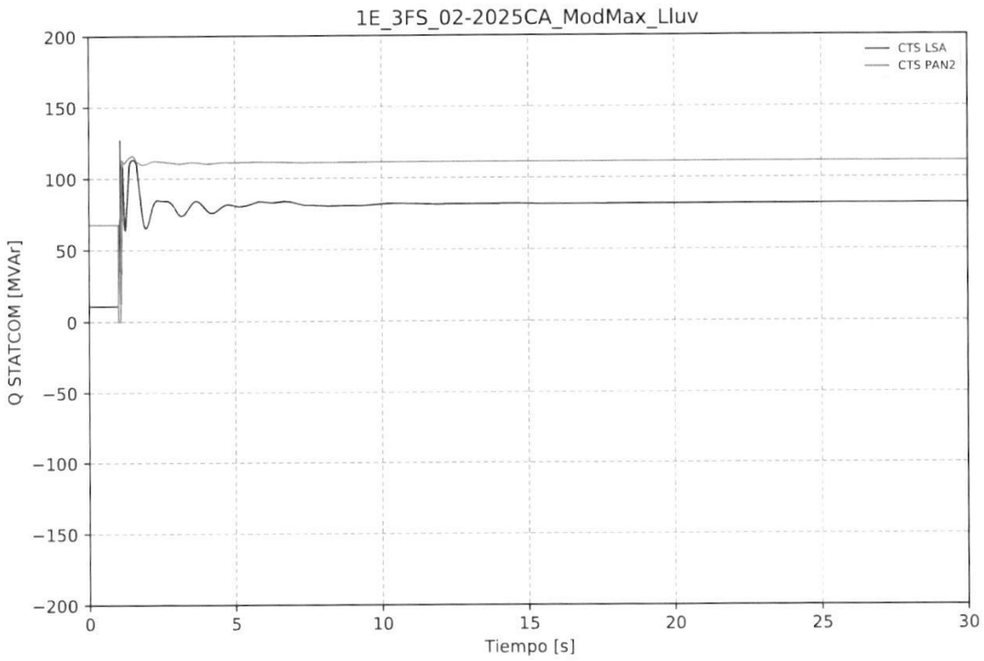
5651


1E_3FS_02-2025CA_ModMax_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

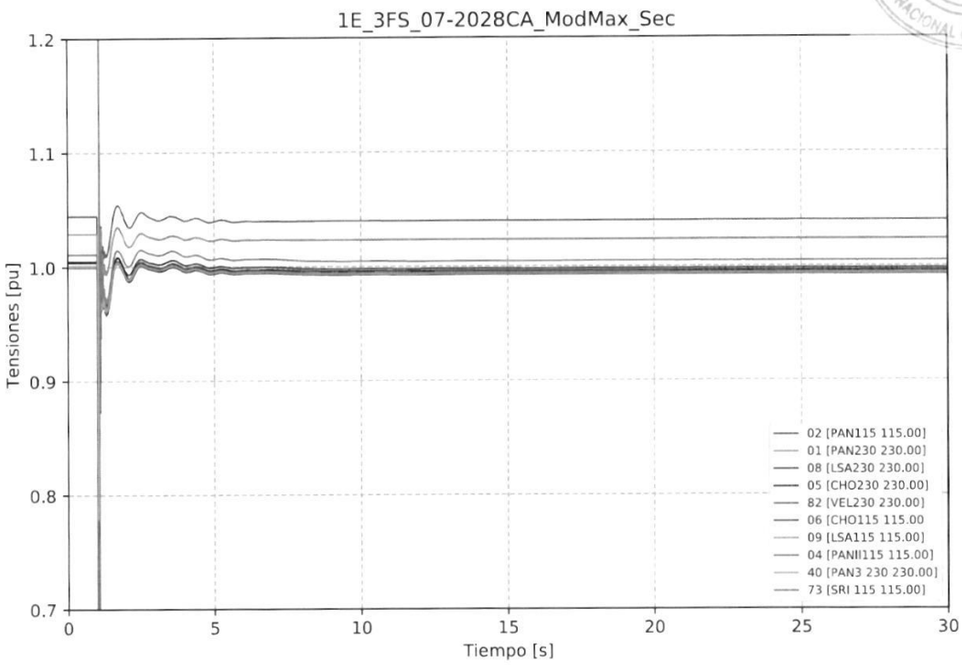

1E_3FS_02-2025CA_ModMax_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

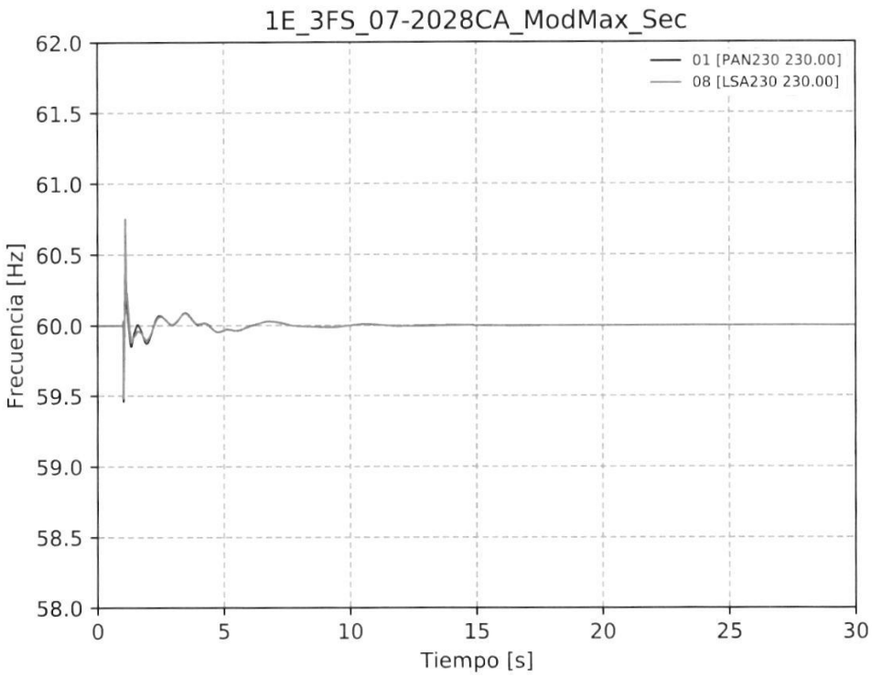
5652


1E_3FS_02-2025CA_ModMax_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

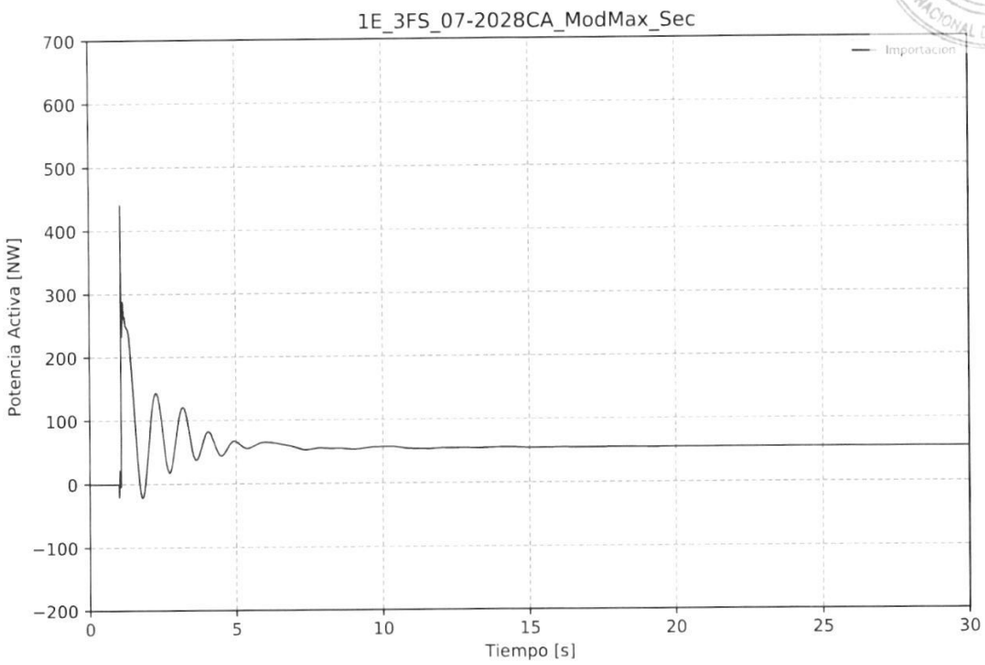

1E_3FS_02-2025CA_ModMax_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

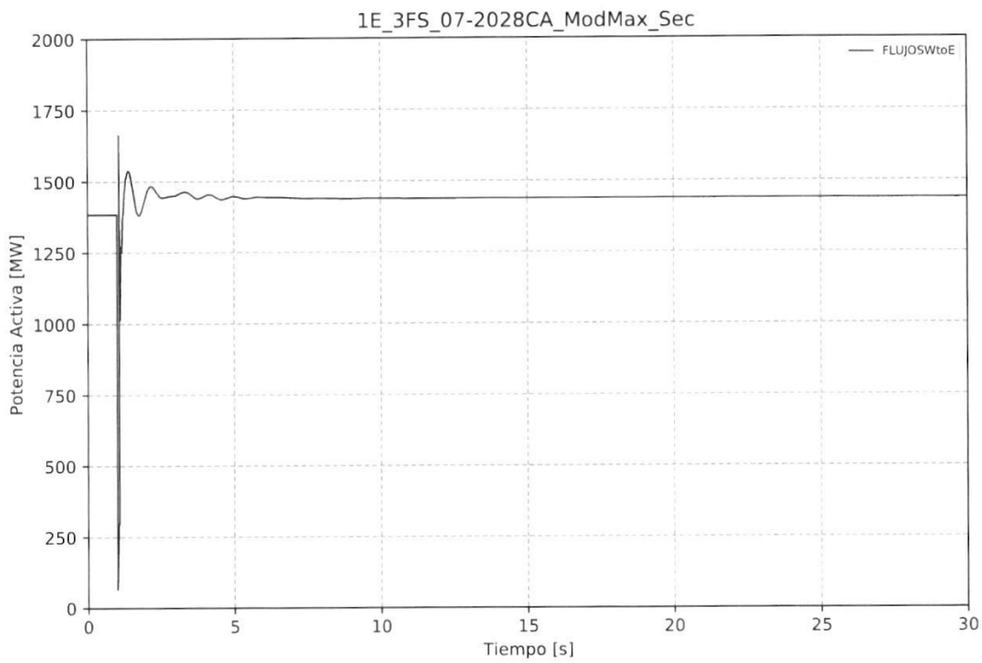
5653


1E_3FS_07-2028CA_ModMax_Sec
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

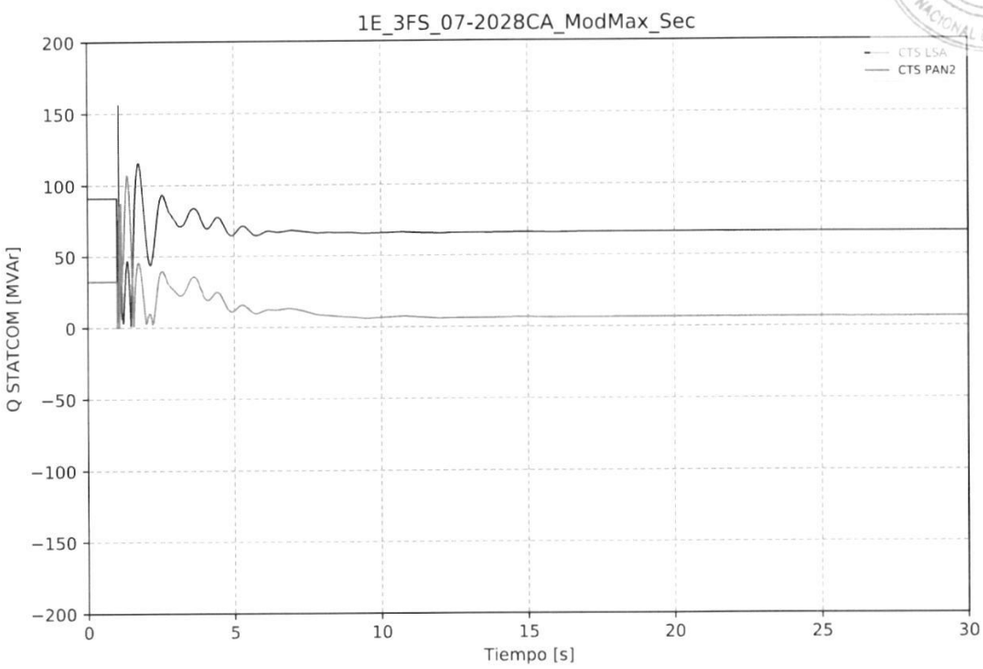

1E_3FS_07-2028CA_ModMax_Sec
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

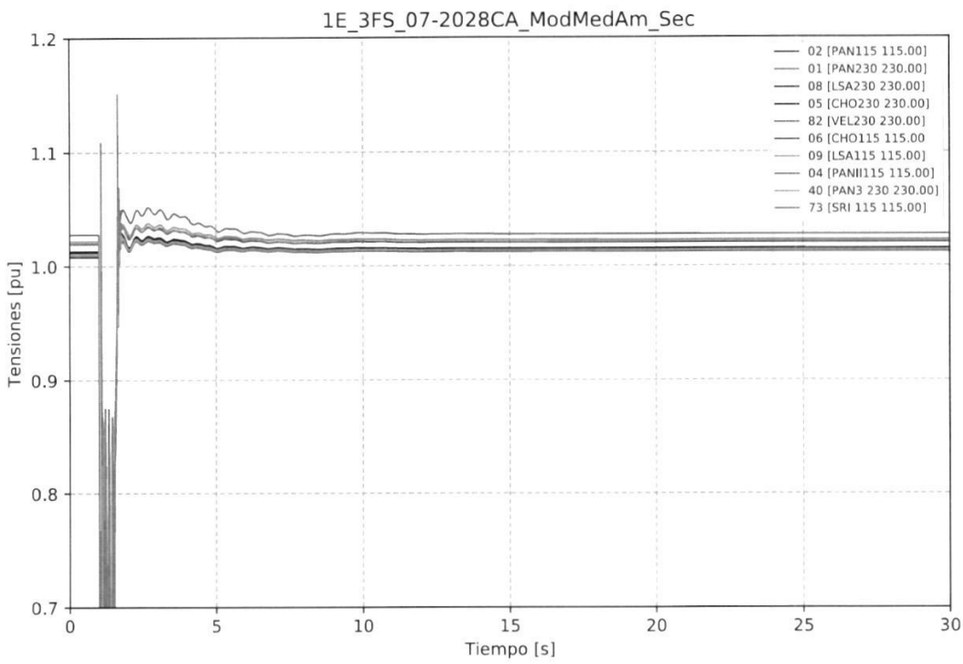
5654


1E_3FS_07-2028CA_ModMax_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30

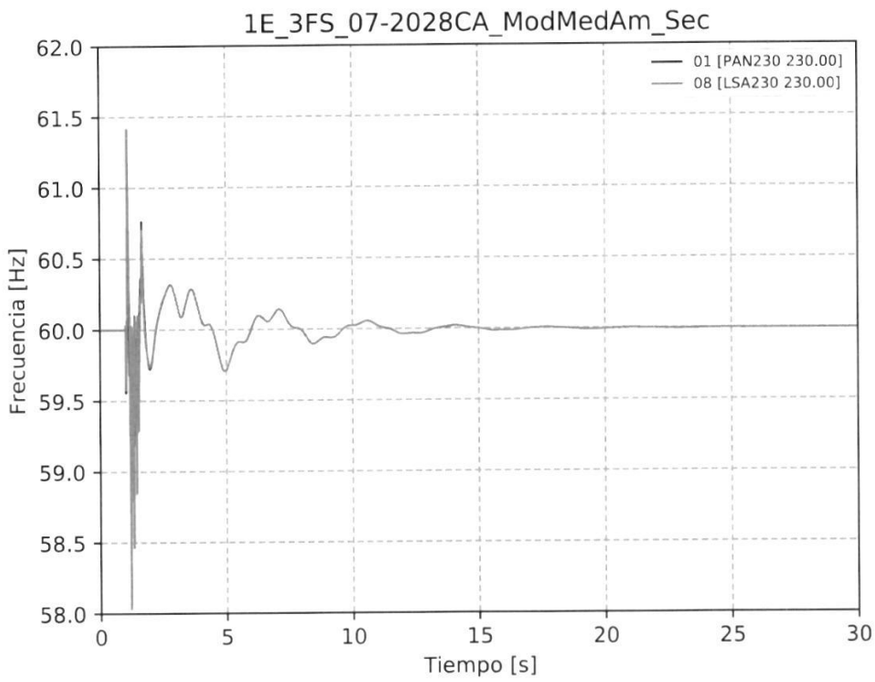

1E_3FS_07-2028CA_ModMax_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30

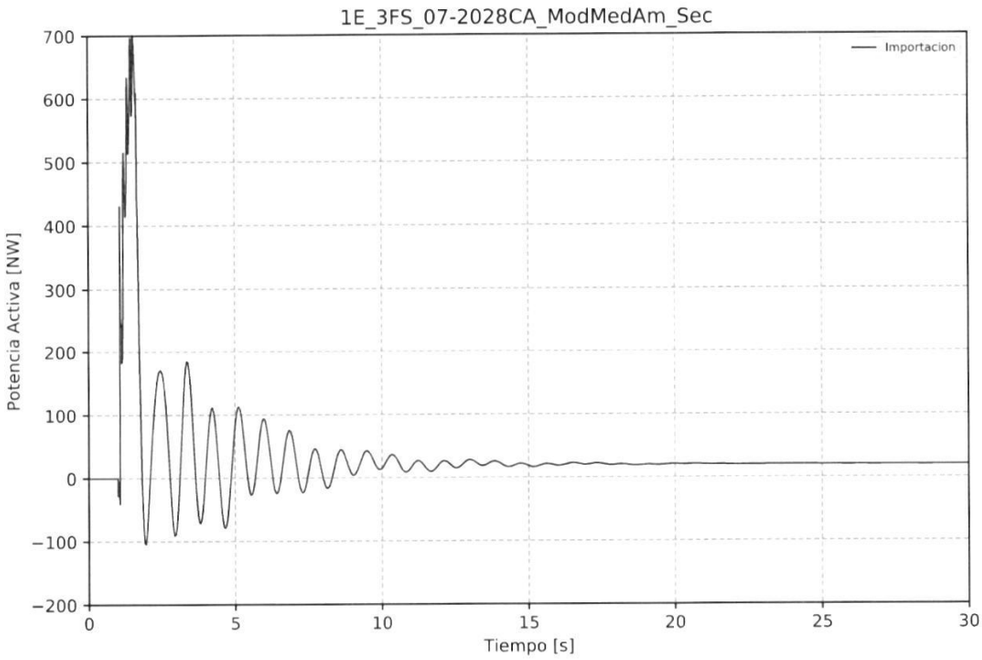
5655


1E_3FS_07-2028CA_ModMax_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

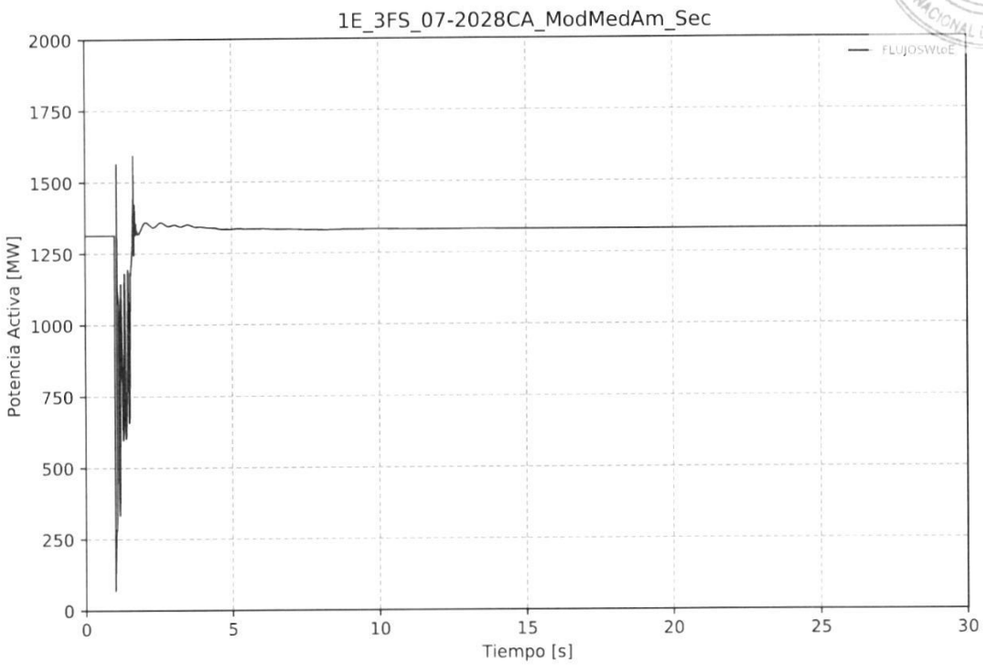

1E_3FS_07-2028CA_ModMedAm_Sec
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

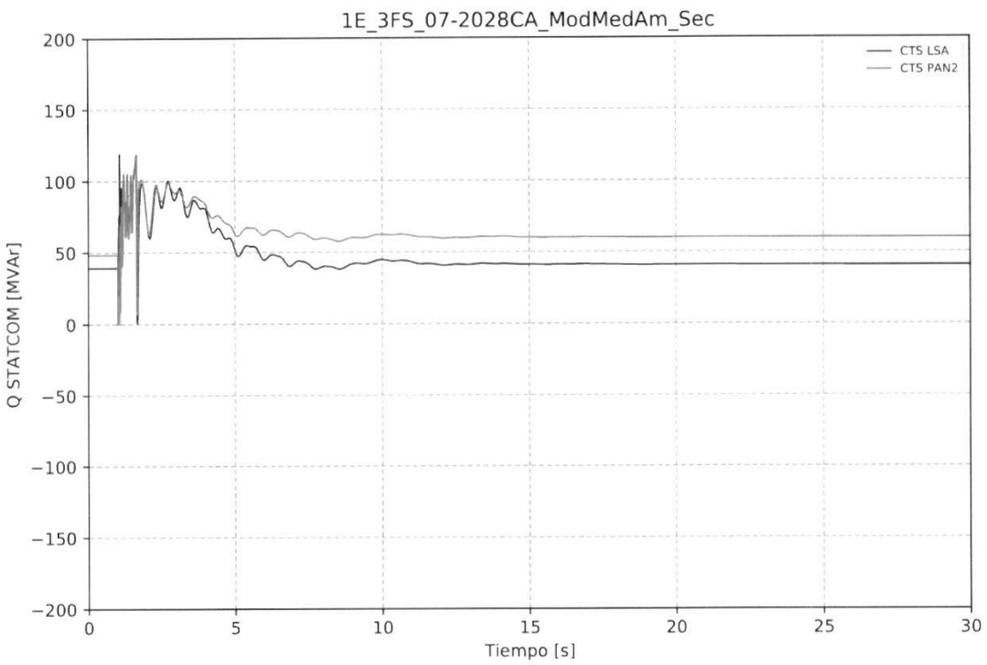
5656


1E_3FS_07-2028CA_ModMedAm_Sec
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

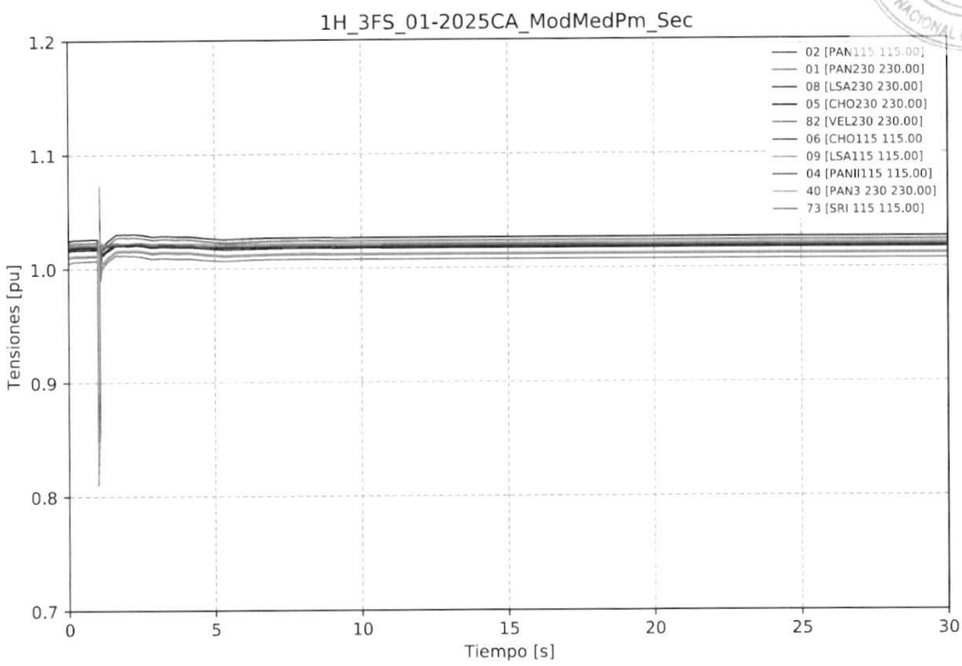

1E_3FS_07-2028CA_ModMedAm_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]

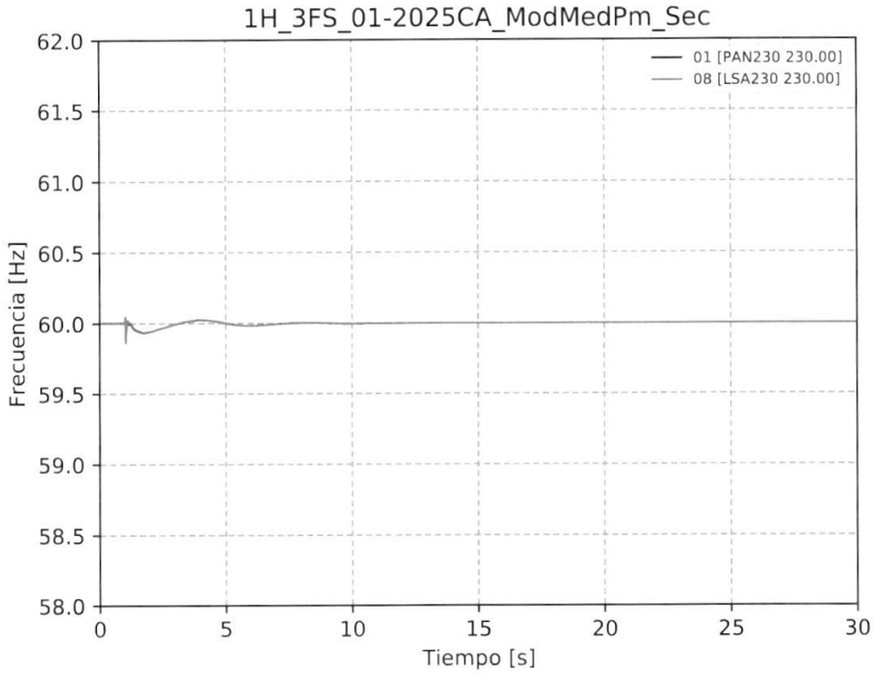
5657


1E_3FS_07-2028CA_ModMedAm_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

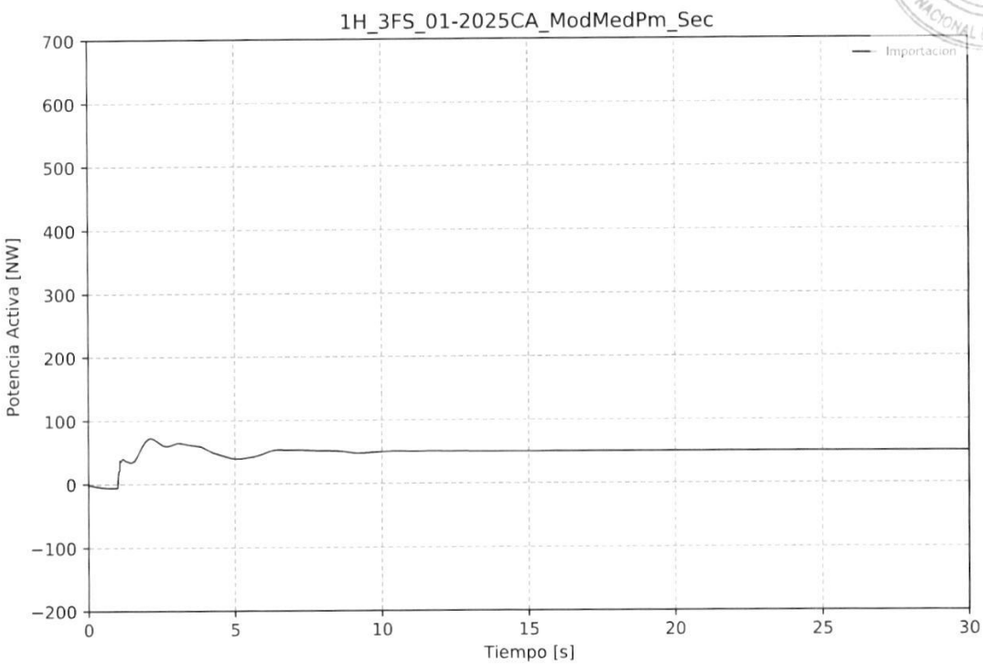

1E_3FS_07-2028CA_ModMedAm_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

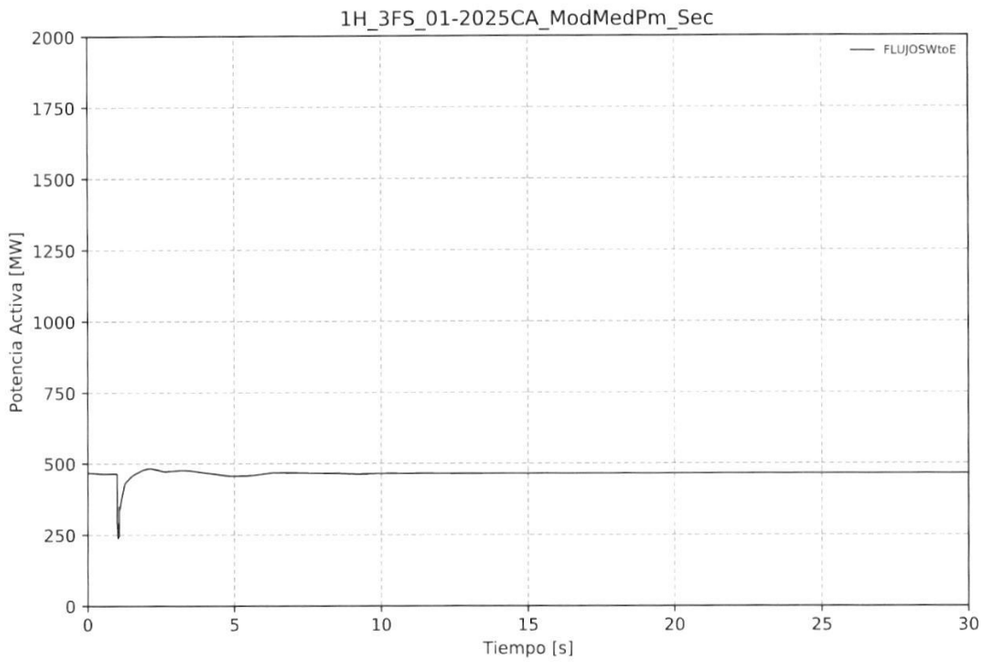
5658


1H_3FS_01-2025CA_ModMedPm_Sec
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

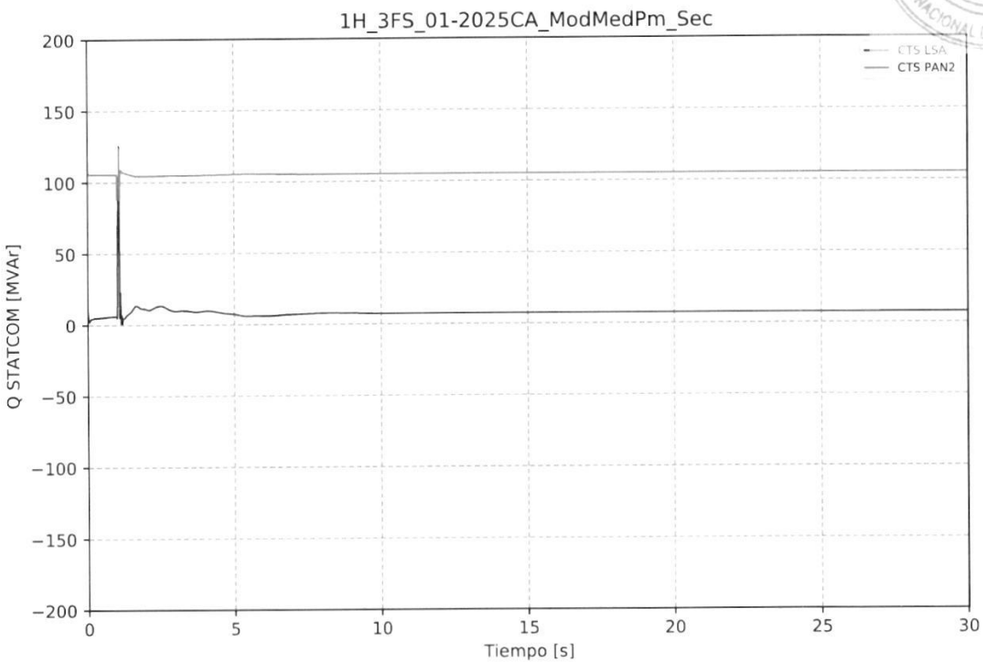

1H_3FS_01-2025CA_ModMedPm_Sec
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

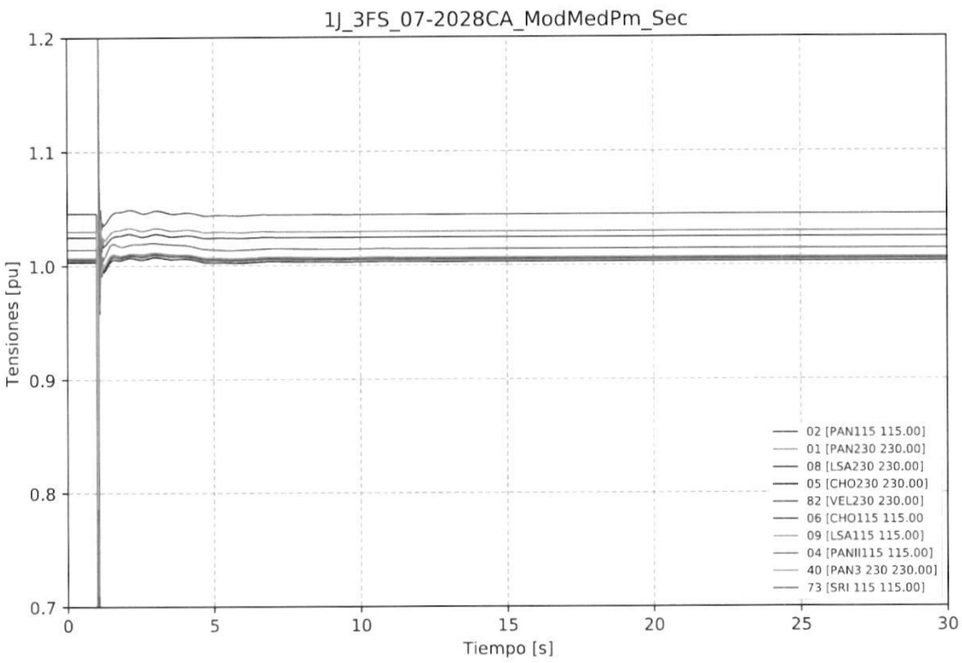
5659


1H_3FS_01-2025CA_ModMedPm_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]

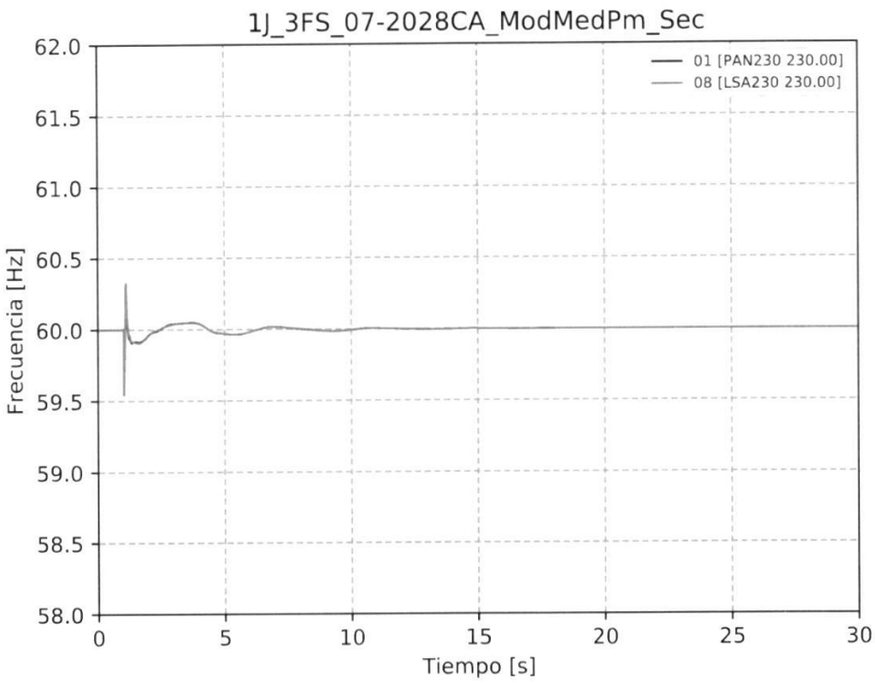

1H_3FS_01-2025CA_ModMedPm_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

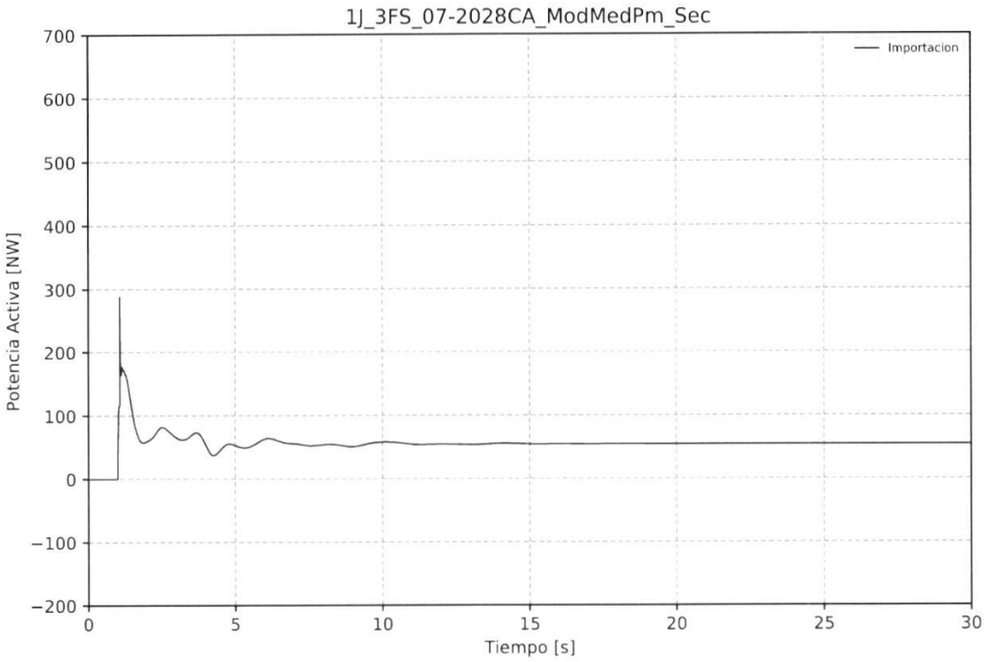
5660


1H_3FS_01-2025CA_ModMedPm_Sec
Q STATCOM [MVAr]
Tiempo [s]
CTS LSA
CTS PAN2

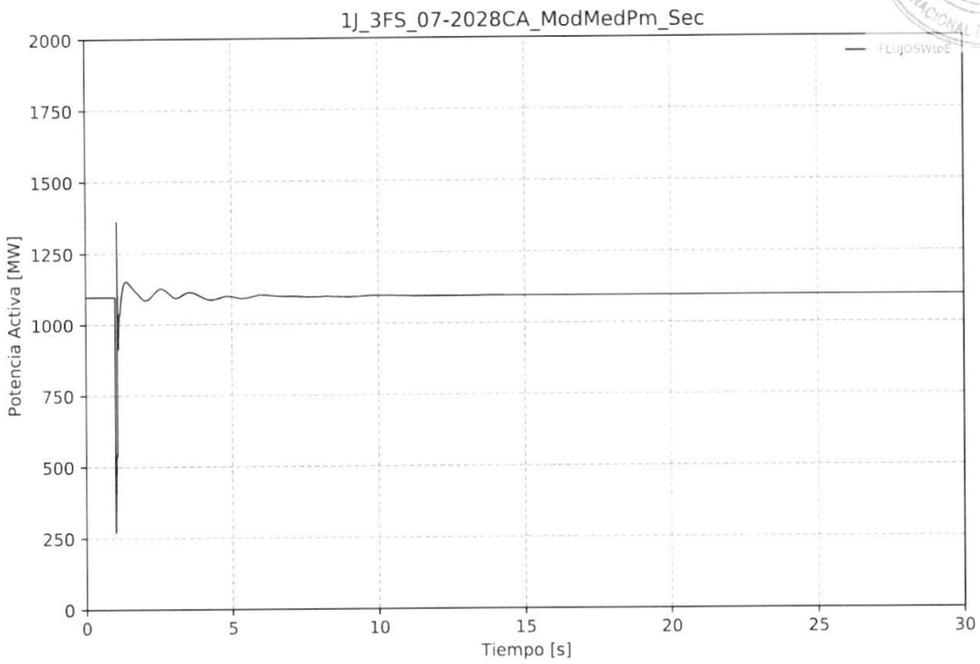

1J_3FS_07-2028CA_ModMedPm_Sec
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

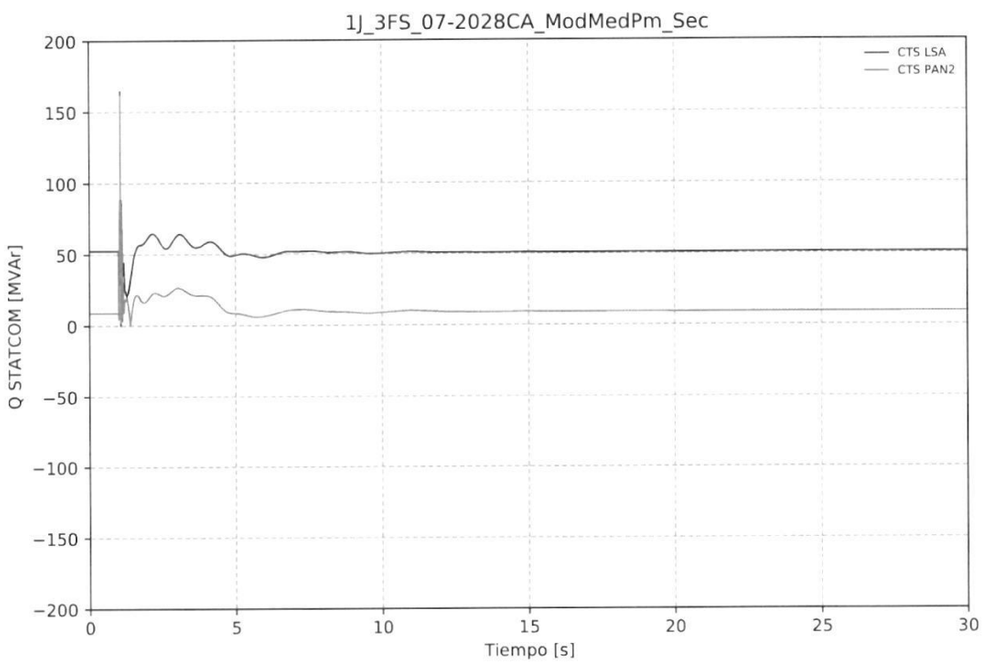
5661


1J_3FS_07-2028CA_ModMedPm_Sec
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
62.0
61.5
61.0
60.5
60.0
59.5
59.0
58.5
58.0
0
5
10
15
20
25
30
Tiempo [s]


1J_3FS_07-2028CA_ModMedPm_Sec
Importacion
Potencia Activa [NW]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30
Tiempo [s]

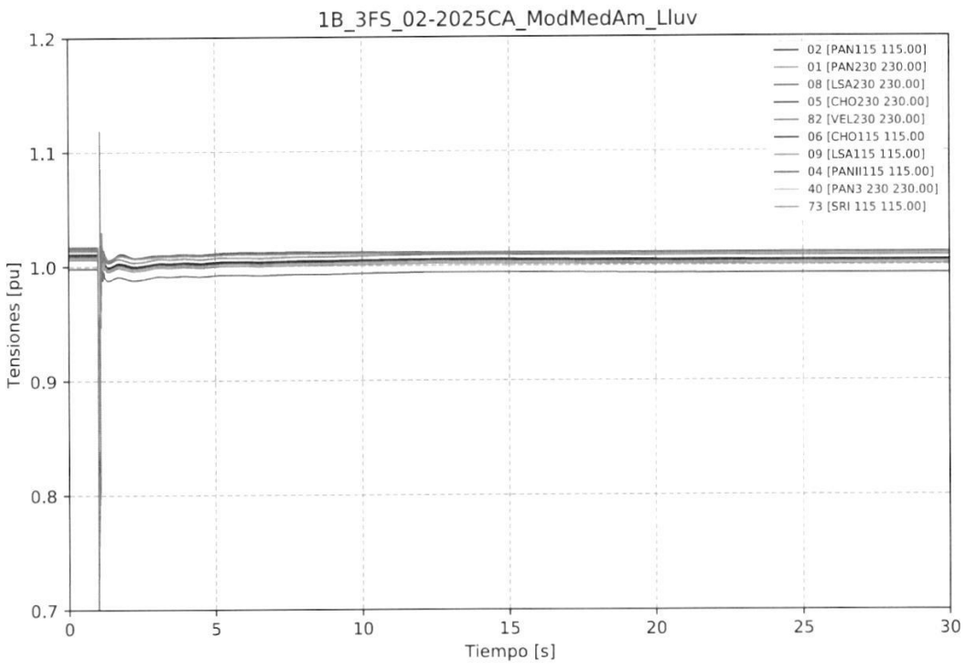
5662


1J_3FS_07-2028CA_ModMedPm_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

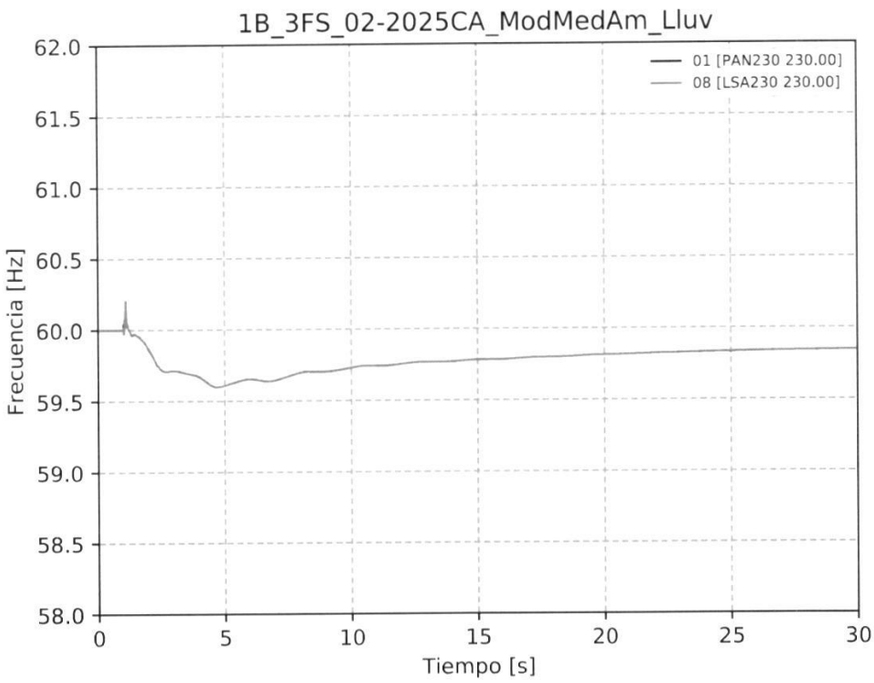

1J_3FS_07-2028CA_ModMedPm_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

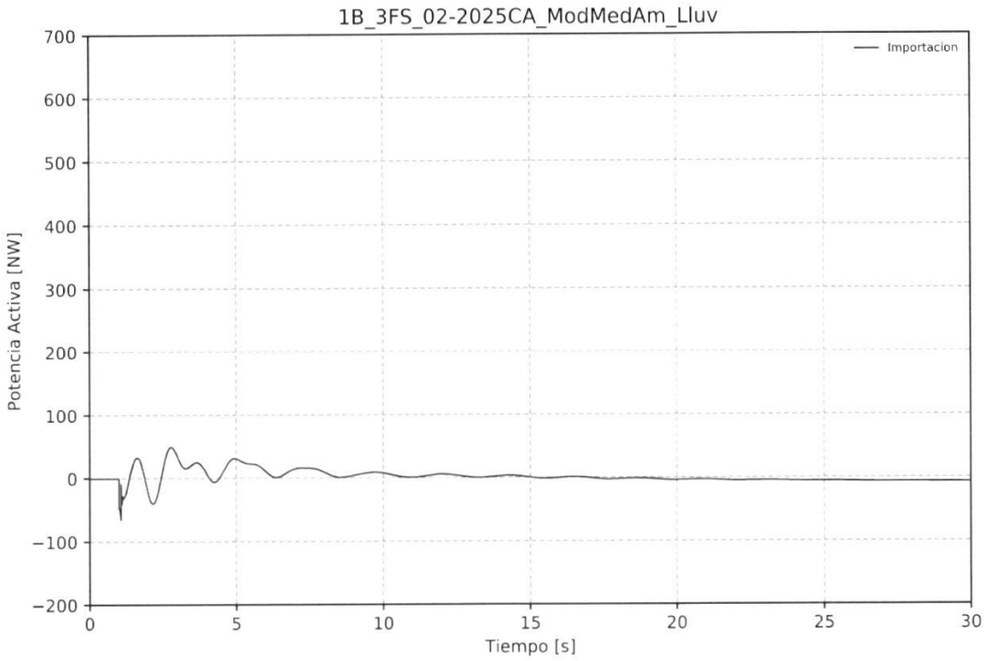
5663

2. FALLAS DE GENERACIÓN + DISPARO DE MÉXICO



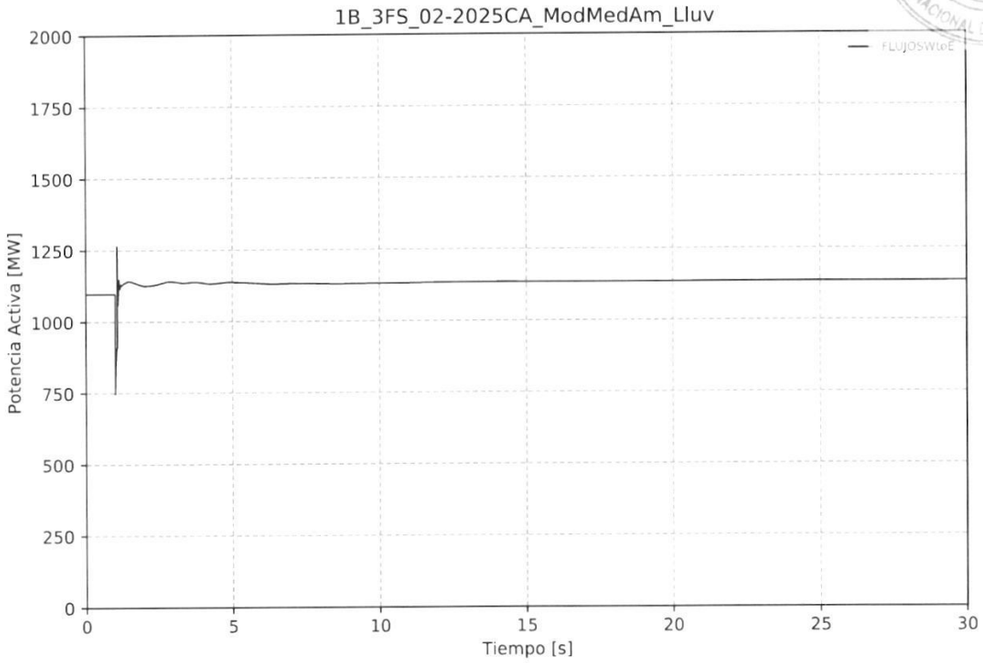
5664

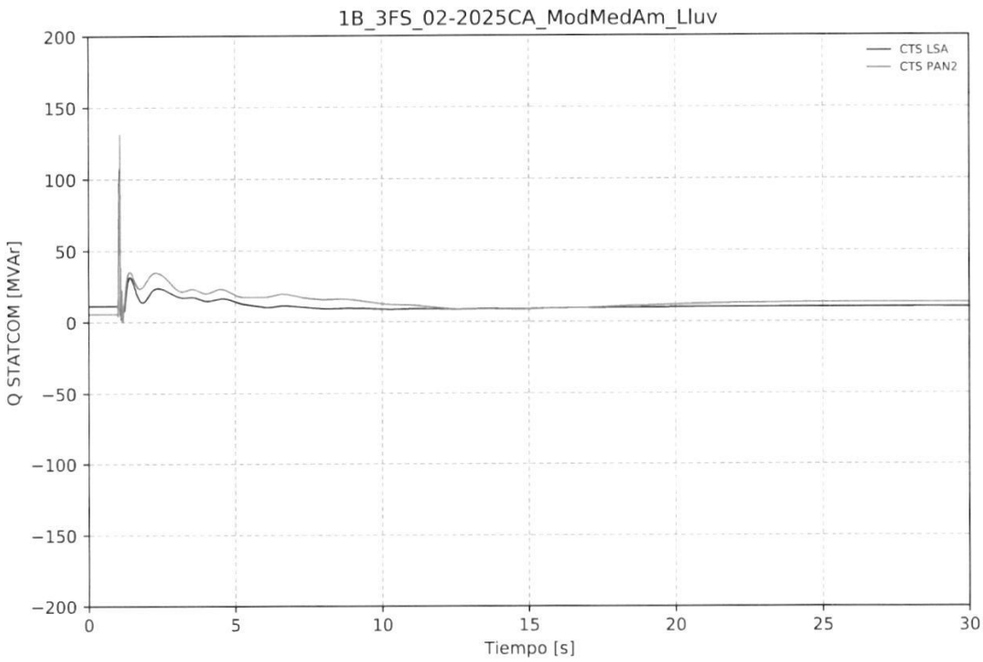

1B_3FS_02-2025CA_ModMedAm_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
62.0
61.5
61.0
60.5
60.0
59.5
59.0
58.5
58.0
0
5
10
15
20
25
30
Tiempo [s]


1B_3FS_02-2025CA_ModMedAm_Lluv
Importacion
Potencia Activa [NW]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30
Tiempo [s]

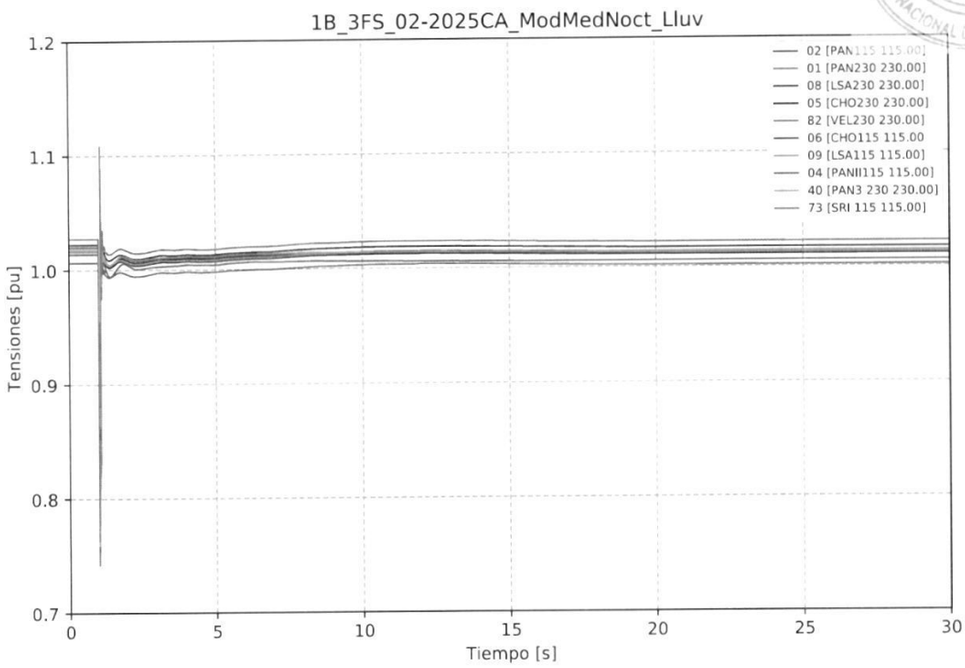
REPUBLICA DE PANAMA
AUTORIDAD NACIONAL DE LOS SERVICIOS PUBLICOS

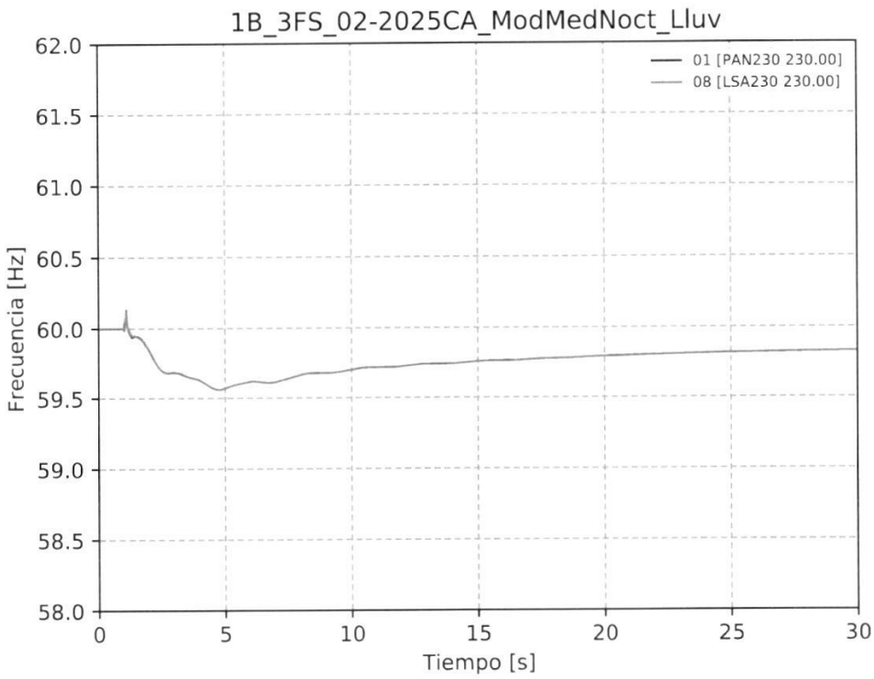
5665



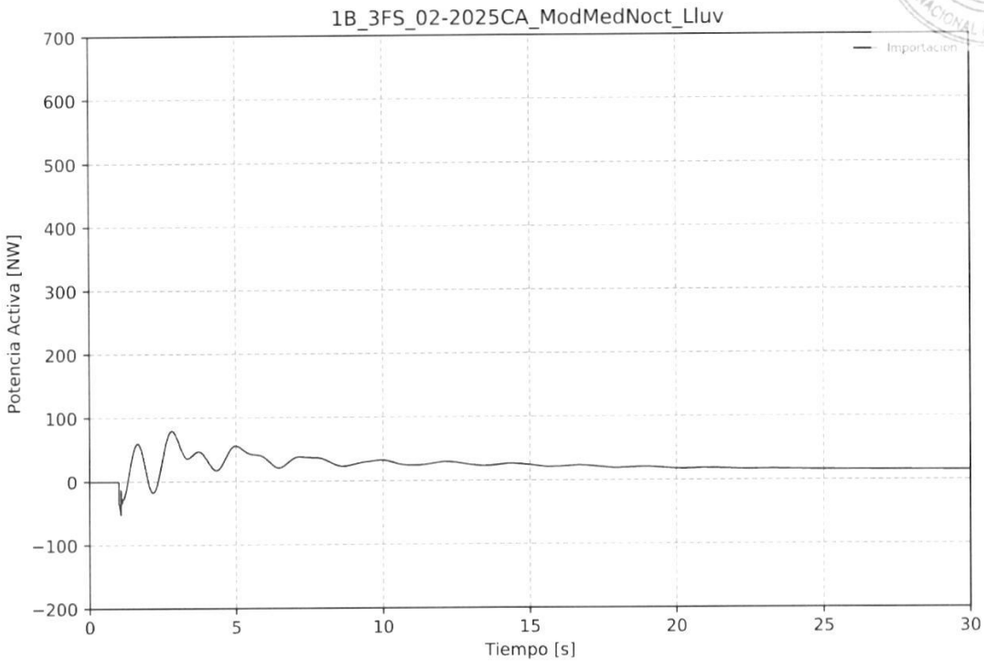


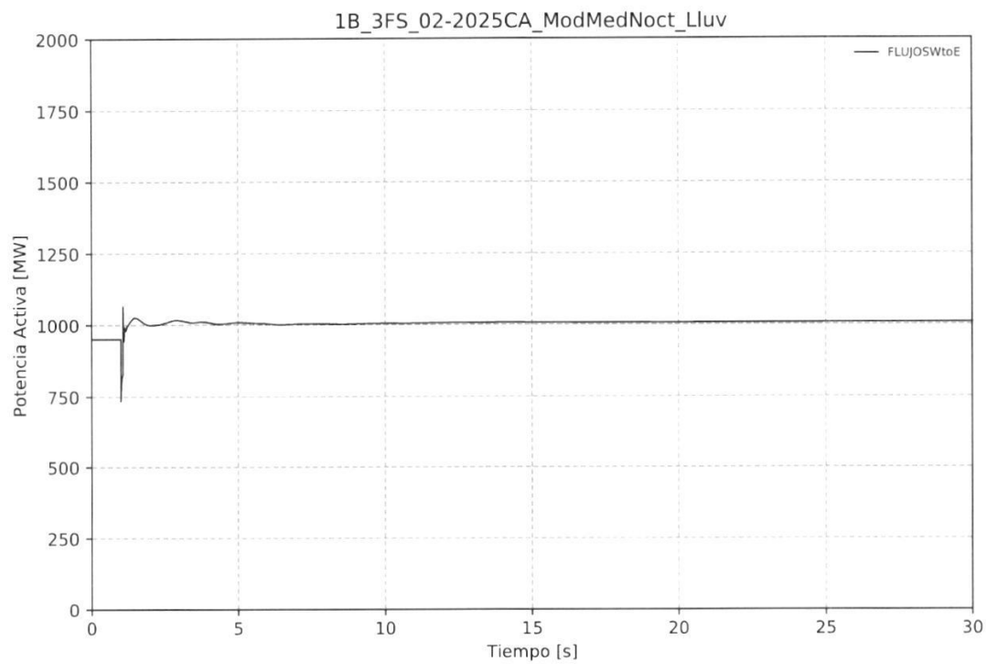
5666


1B_3FS_02-2025CA_ModMedNoct_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

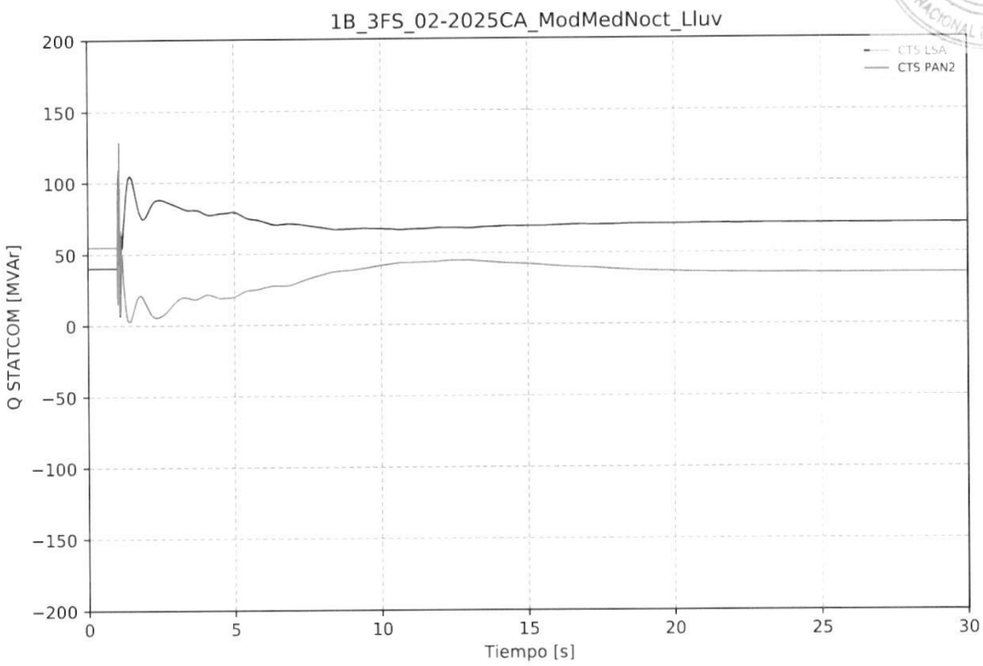

1B_3FS_02-2025CA_ModMedNoct_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

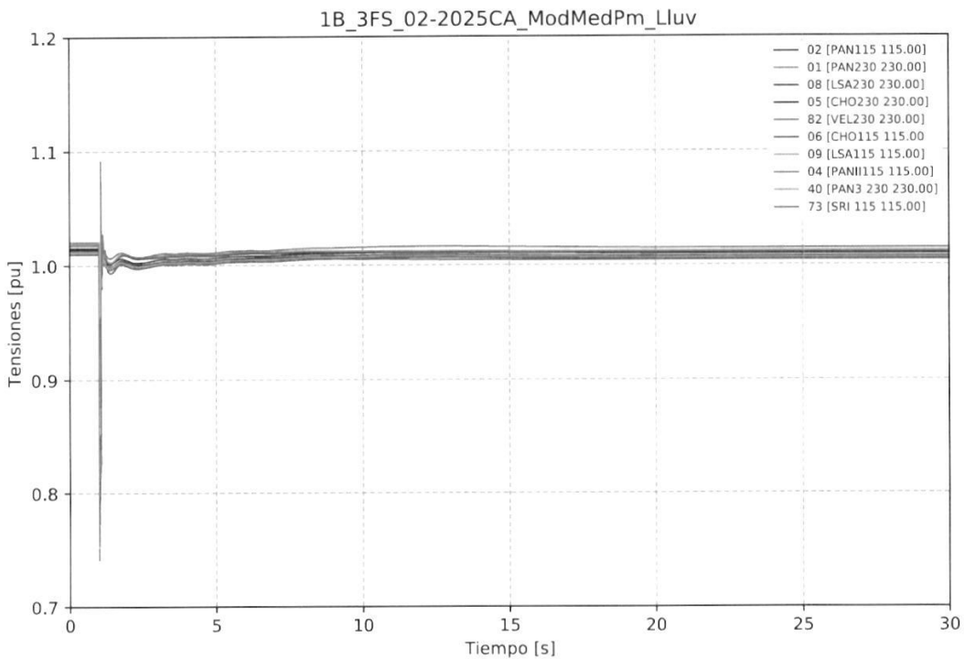
5667


1B_3FS_02-2025CA_ModMedNoct_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30

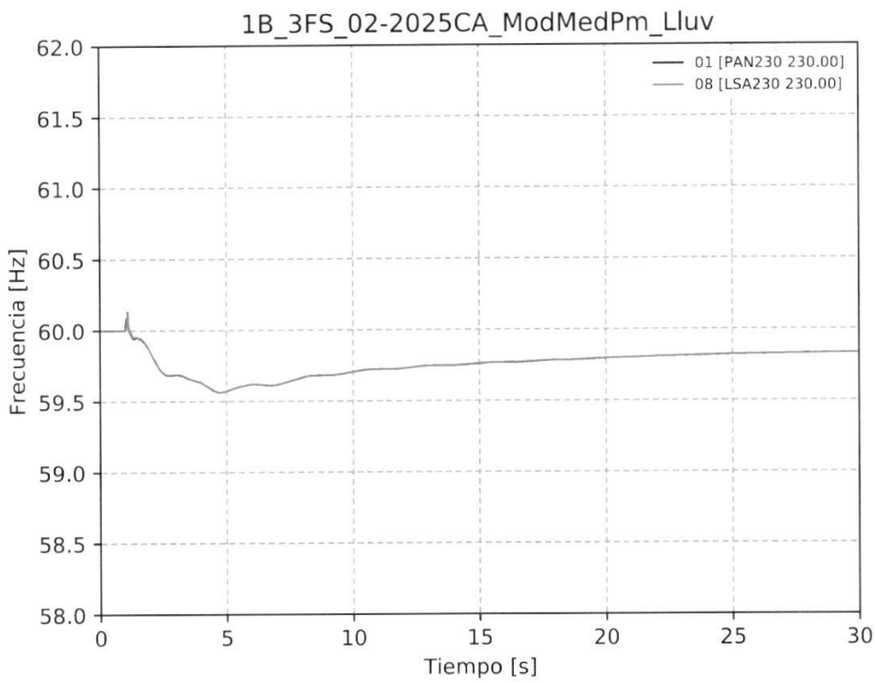

1B_3FS_02-2025CA_ModMedNoct_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30

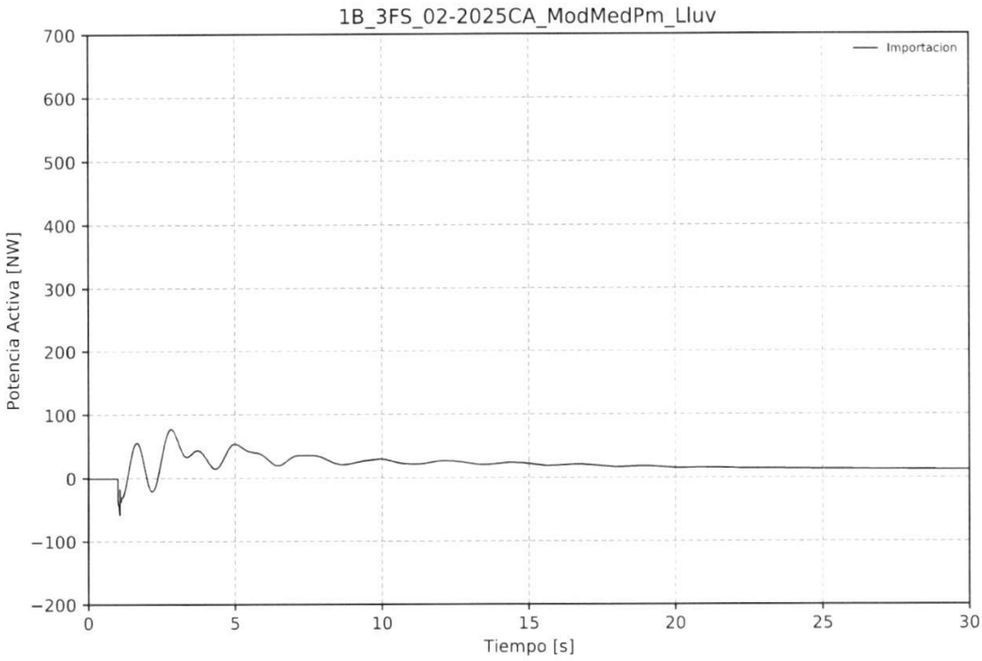
5668


1B_3FS_02-2025CA_ModMedNoct_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

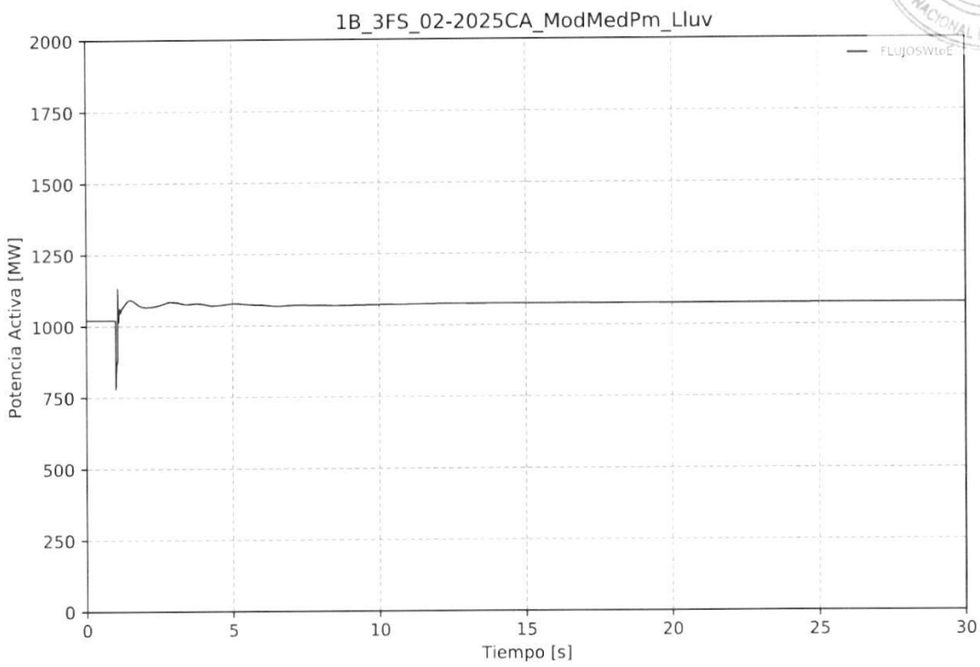

1B_3FS_02-2025CA_ModMedPm_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

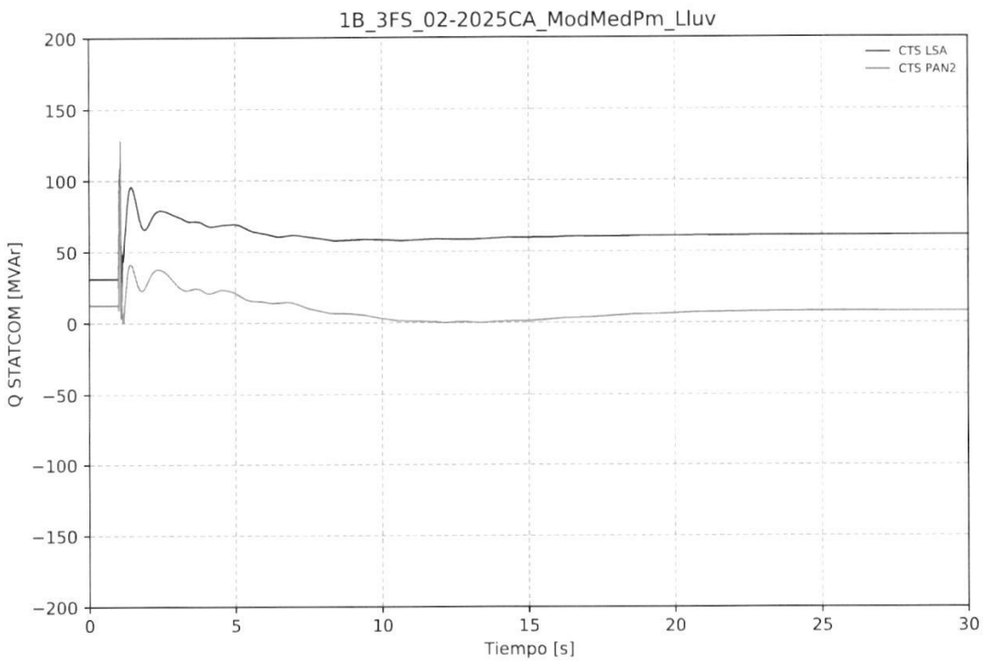
5669


1B_3FS_02-2025CA_ModMedPm_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

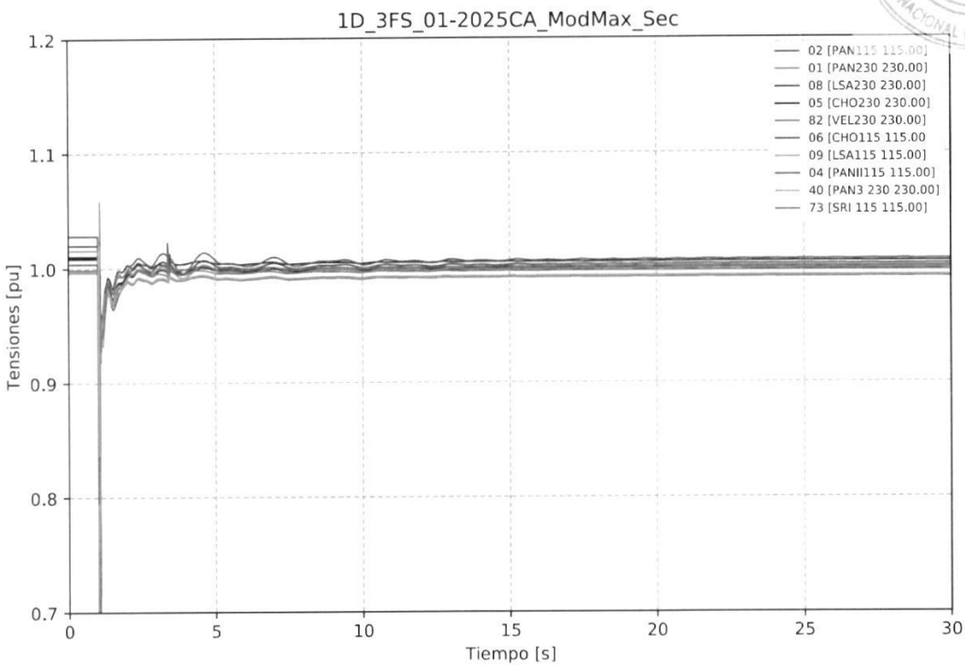

1B_3FS_02-2025CA_ModMedPm_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

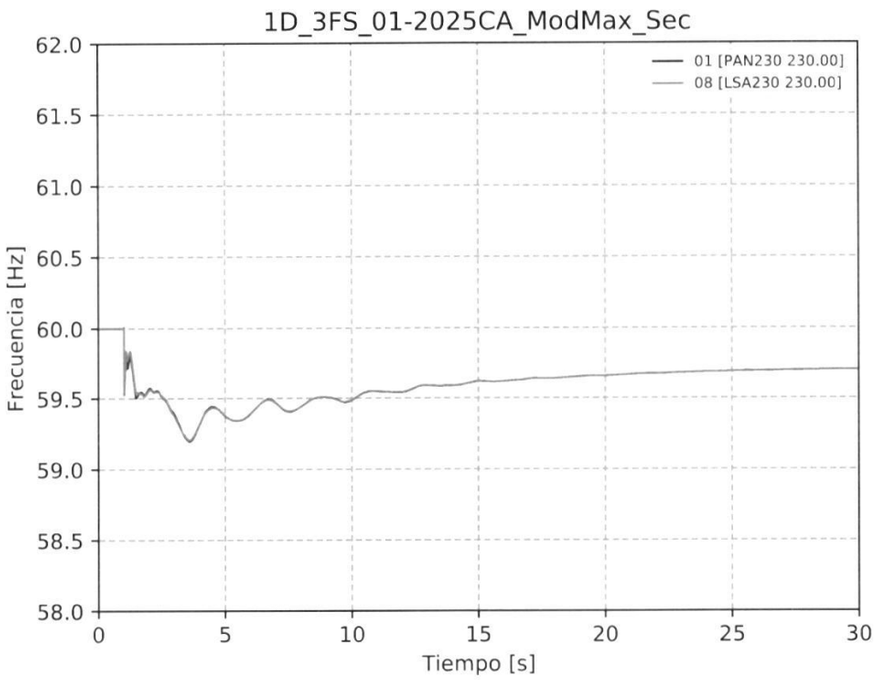
5670


1B_3FS_02-2025CA_ModMedPm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

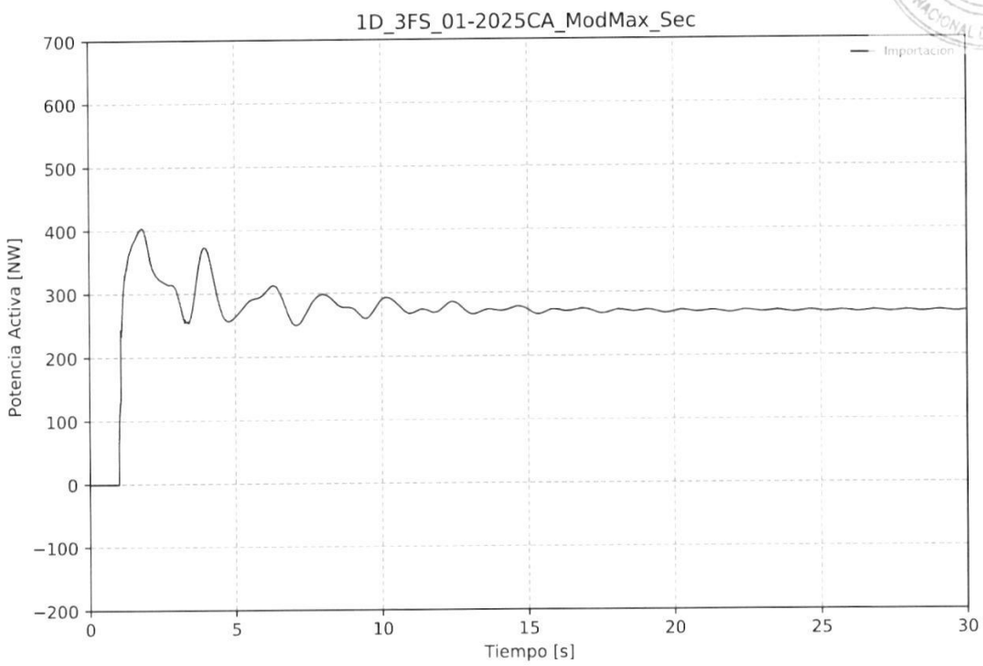

1B_3FS_02-2025CA_ModMedPm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

5671


1D_3FS_01-2025CA_ModMax_Sec
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]


1D_3FS_01-2025CA_ModMax_Sec
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

5672


1D_3FS_01-2025CA_ModMax_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]
700
600
500
400
300
200
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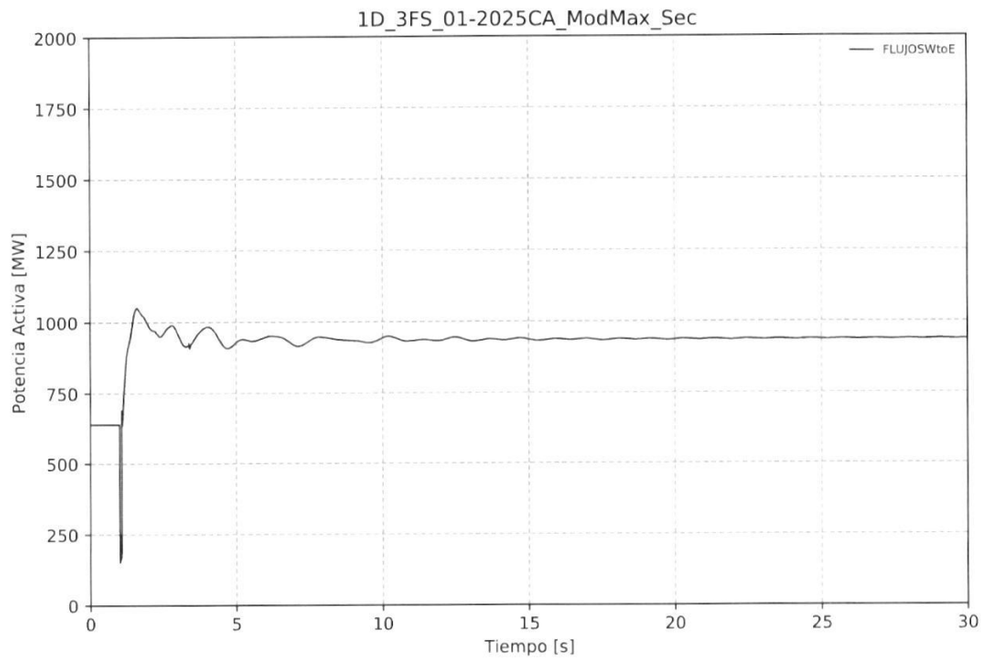
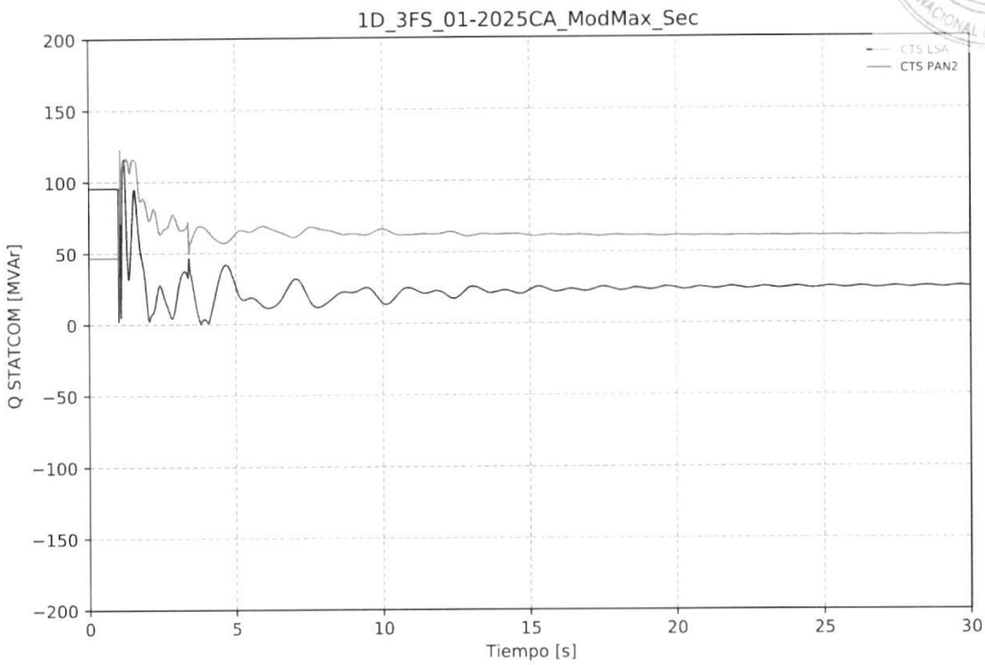
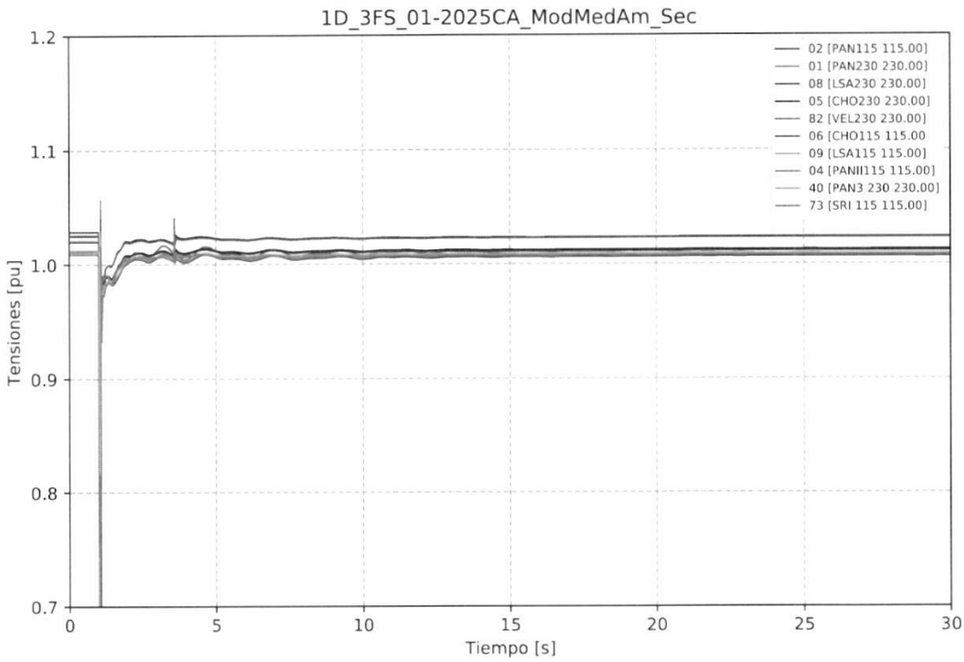
5
10
15
20
25
30

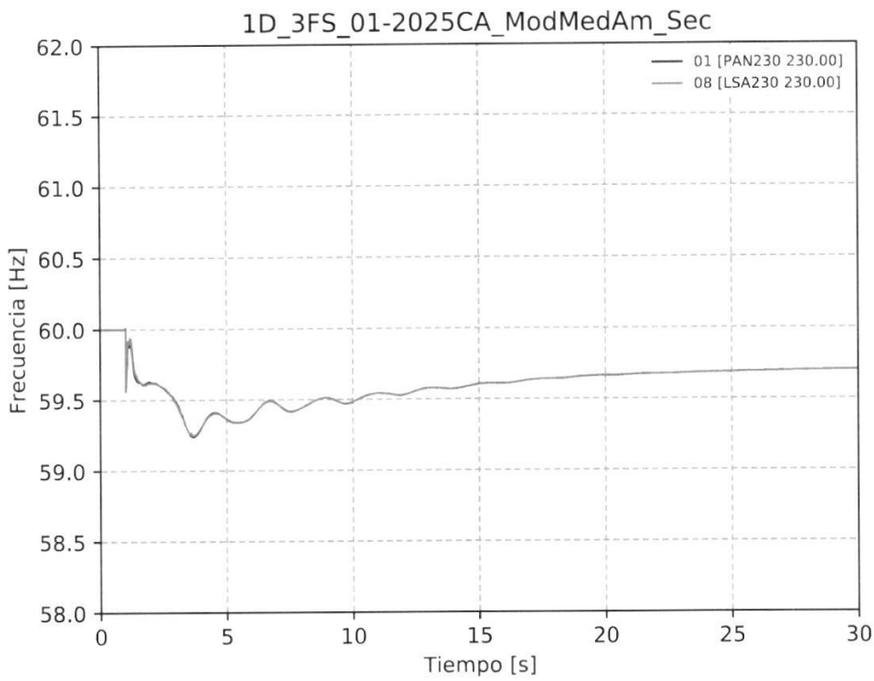

1D_3FS_01-2025CA_ModMax_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30

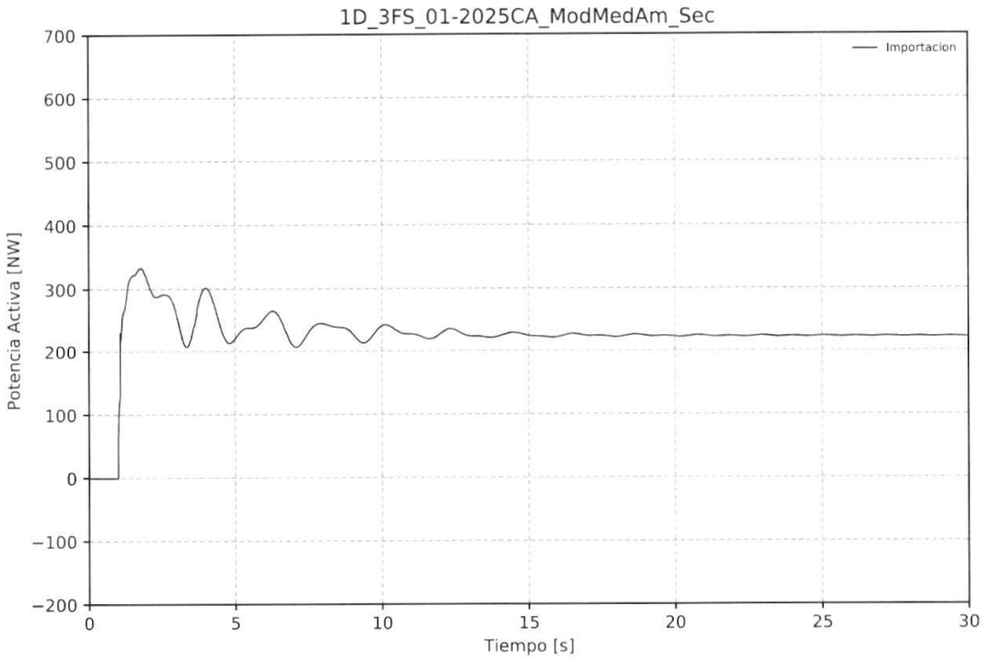
5673


1D_3FS_01-2025CA_ModMax_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]


1D_3FS_01-2025CA_ModMedAm_Sec
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

5674


1D_3FS_01-2025CA_ModMedAm_Sec
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
62.0
61.5
61.0
60.5
60.0
59.5
59.0
58.5
58.0
0
5
10
15
20
25
30
Tiempo [s]


1D_3FS_01-2025CA_ModMedAm_Sec
Importacion
Potencia Activa [NW]
700
600
500
400
300
200
100
0
−100
−200
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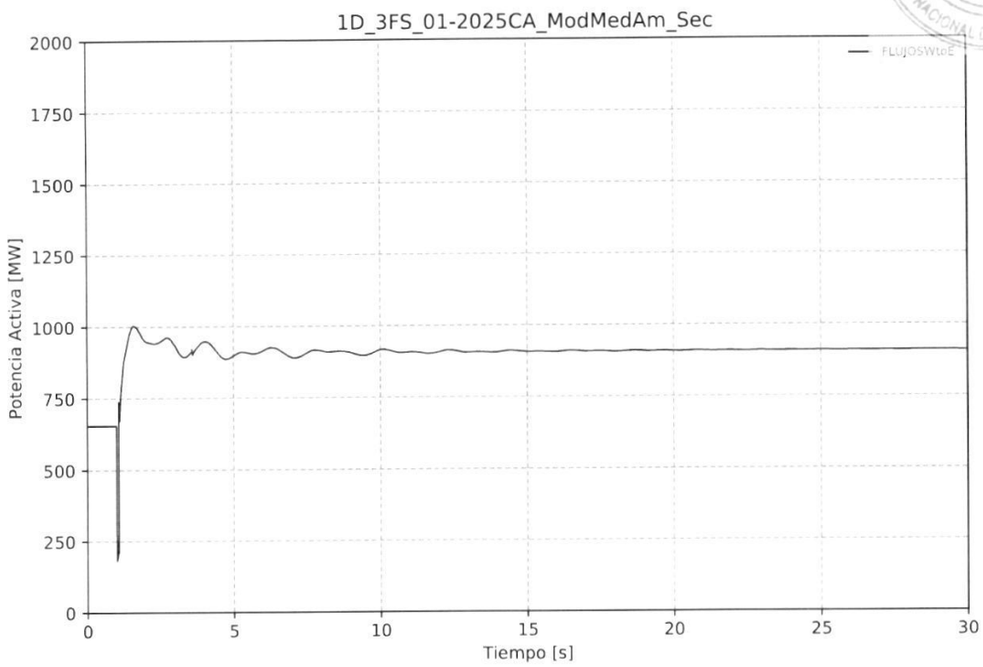
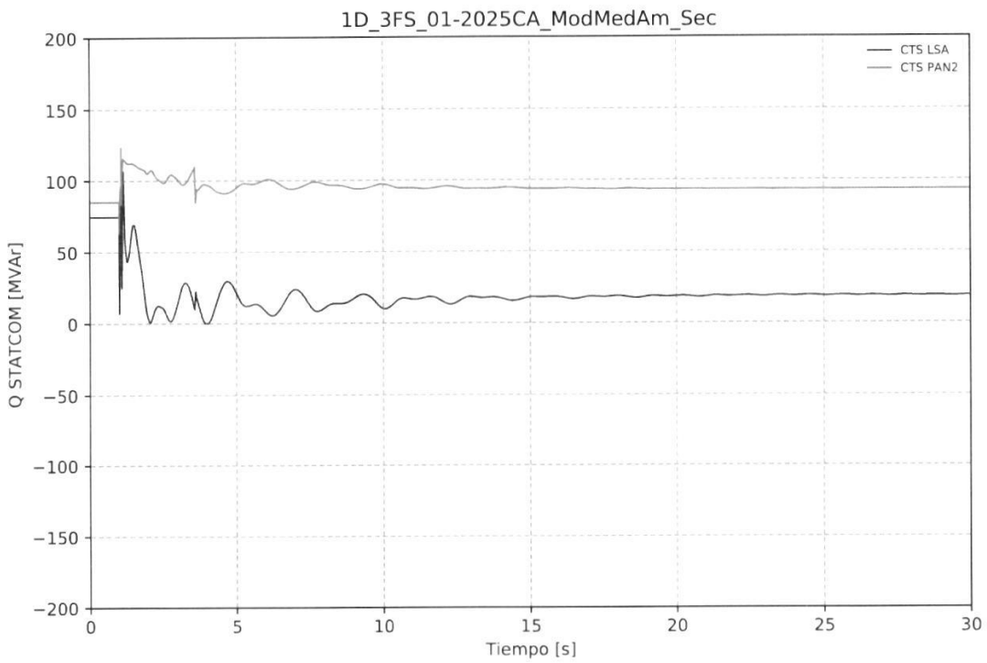
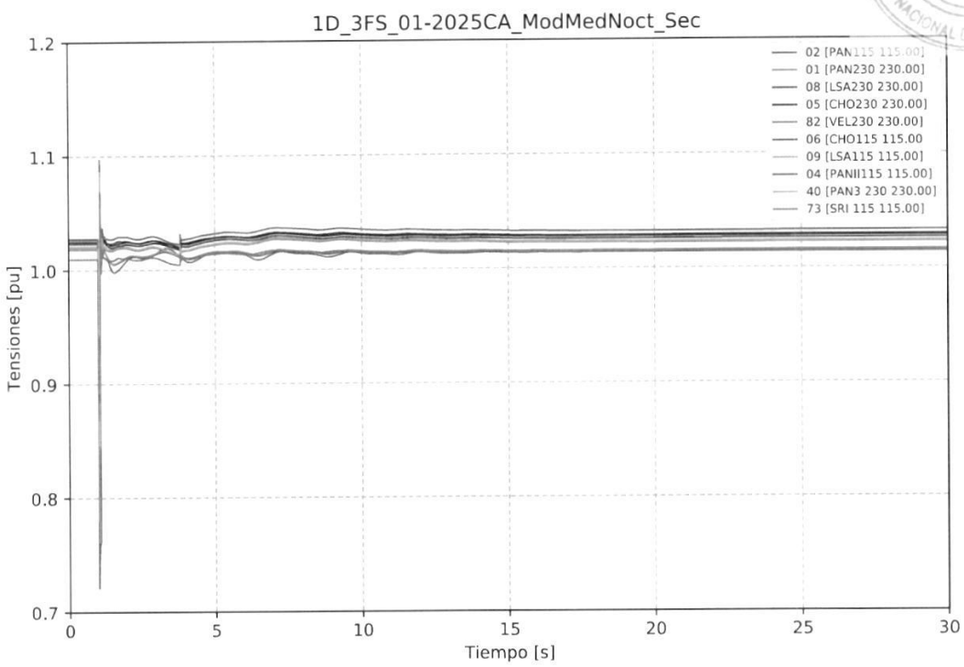
15
20
25
30
Tiempo [s]

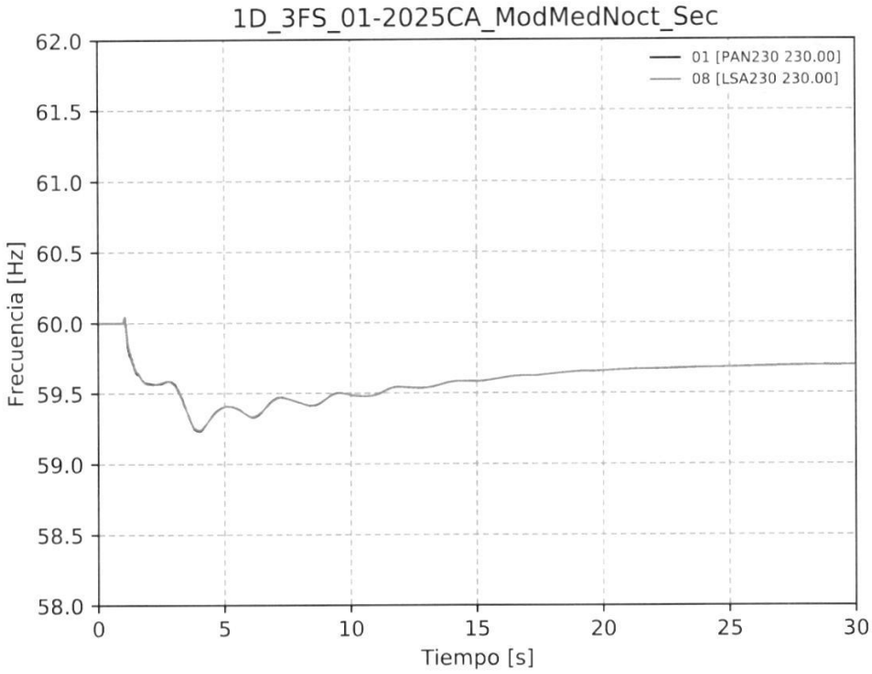
5675


1D_3FS_01-2025CA_ModMedAm_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

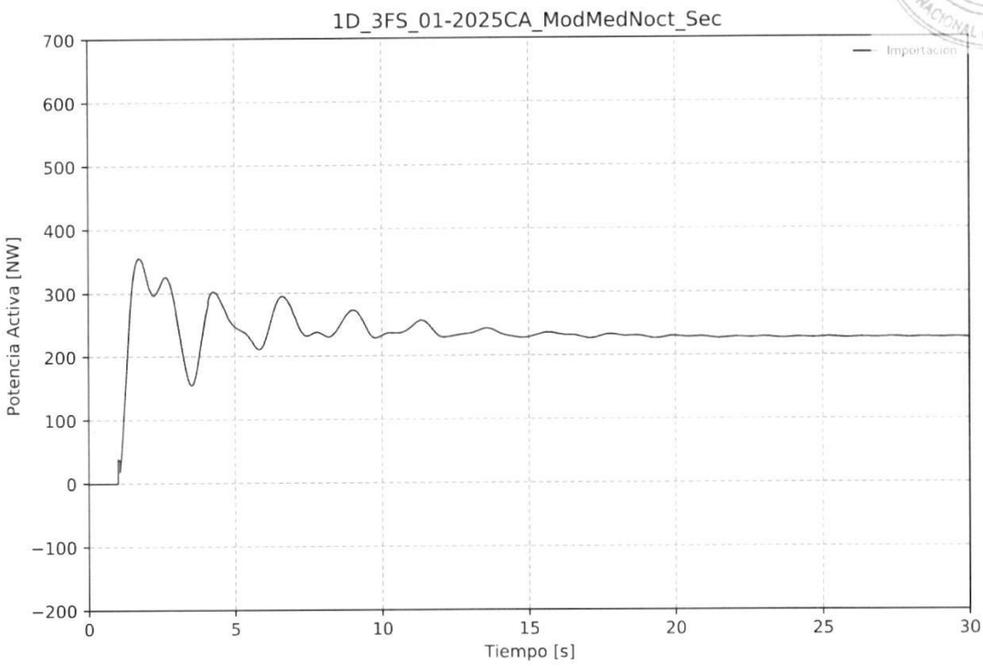

1D_3FS_01-2025CA_ModMedAm_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

5676


1D_3FS_01-2025CA_ModMedNoct_Sec
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]


1D_3FS_01-2025CA_ModMedNoct_Sec
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

5677


1D_3FS_01-2025CA_ModMedNoct_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]
700
600
500
400
300
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−200
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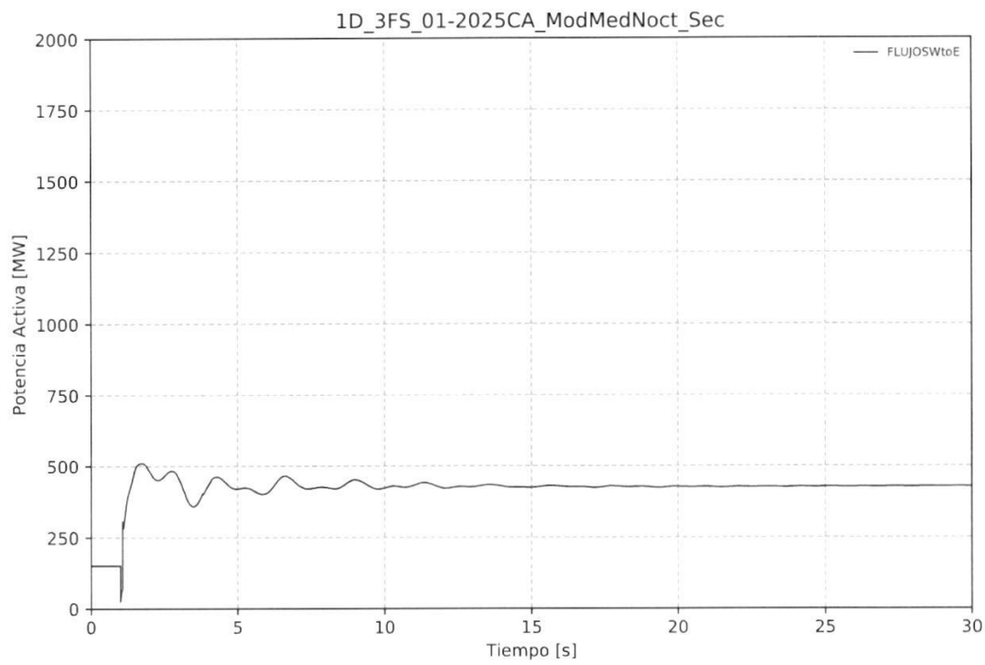
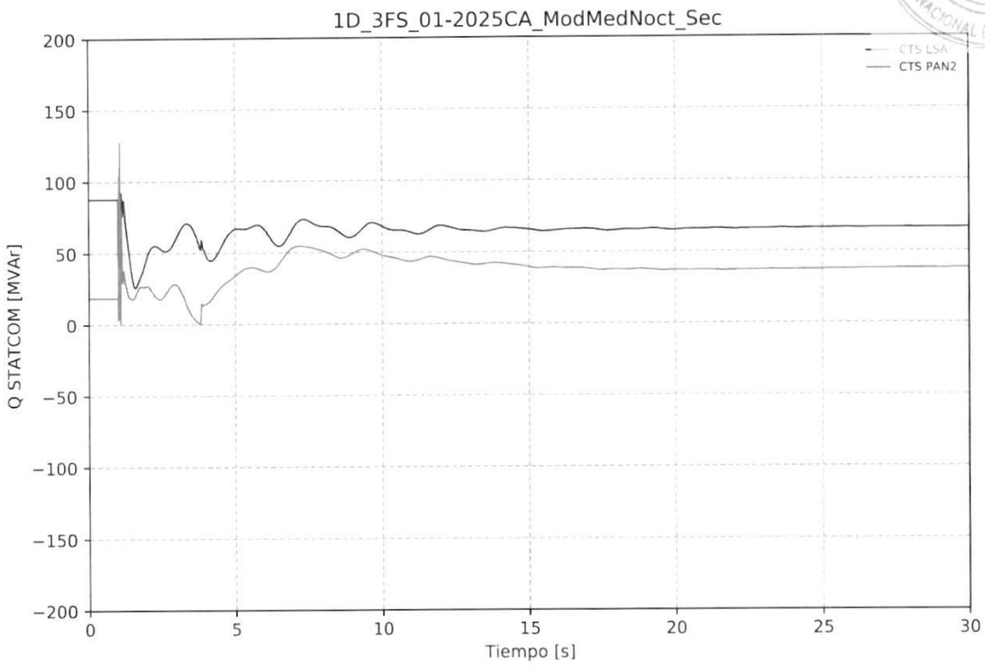
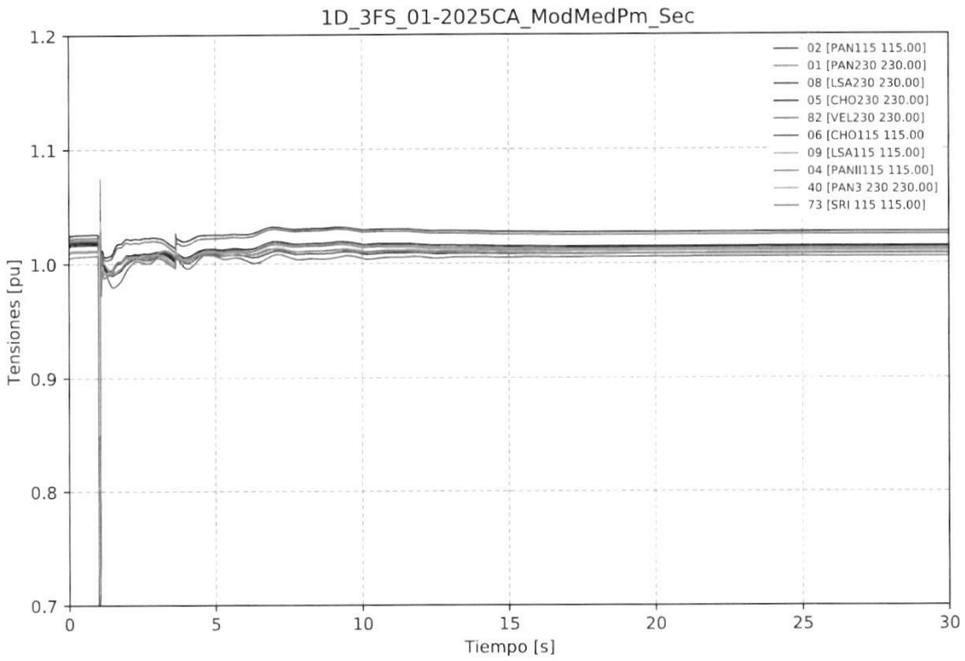
5
10
15
20
25
30

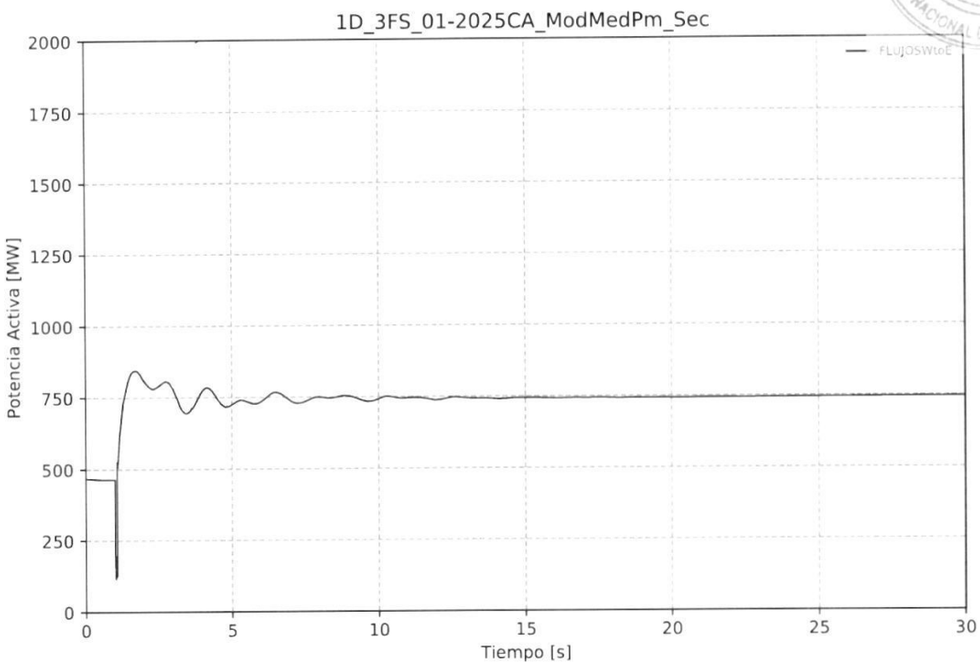

1D_3FS_01-2025CA_ModMedNoct_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30

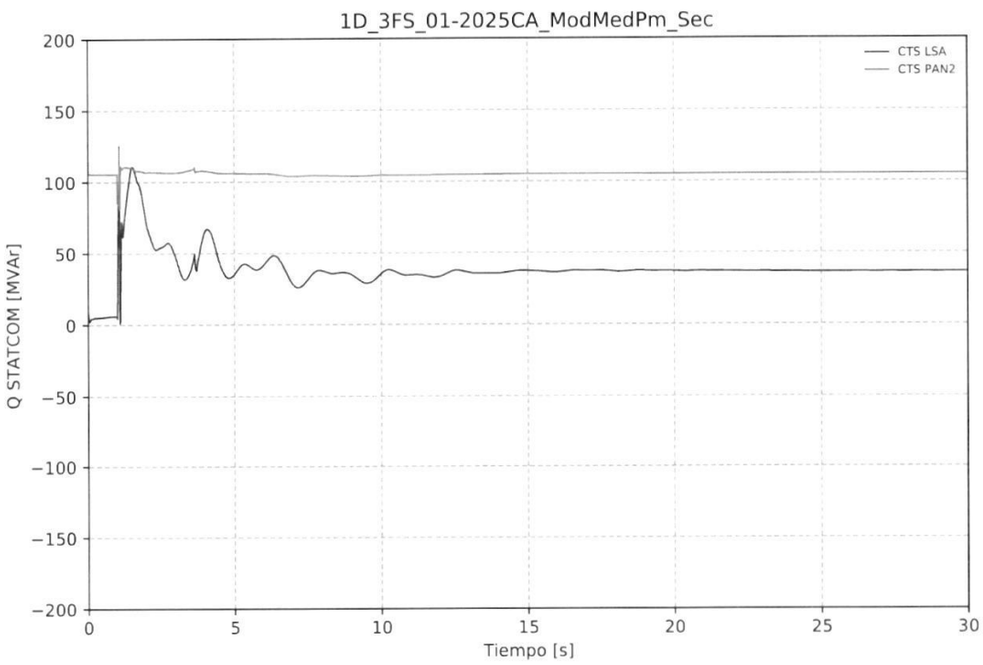
5678


1D_3FS_01-2025CA_ModMedNoct_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

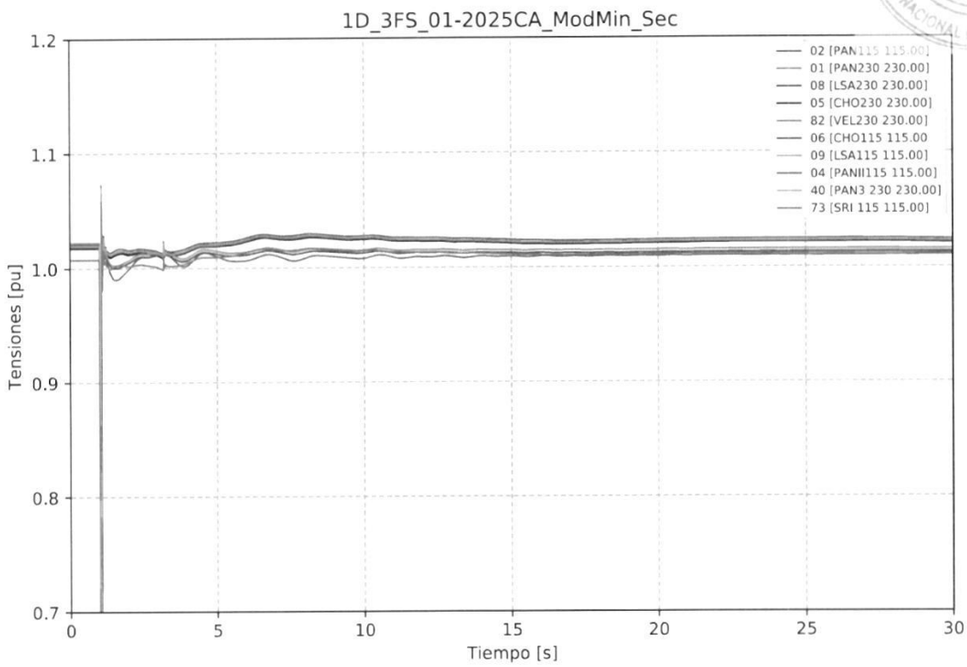

1D_3FS_01-2025CA_ModMedPm_Sec
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

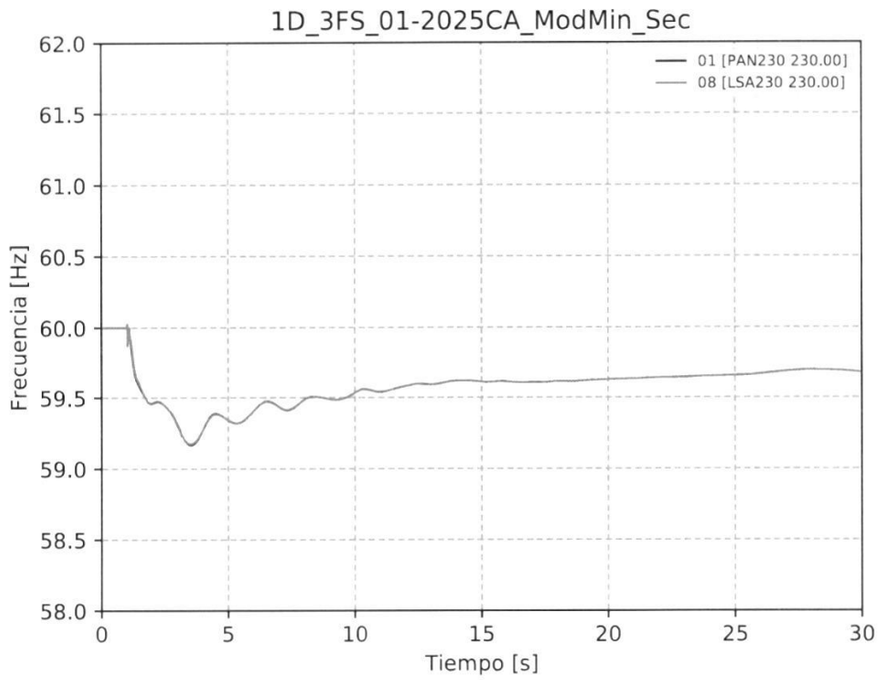
5680


1D_3FS_01-2025CA_ModMedPm_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

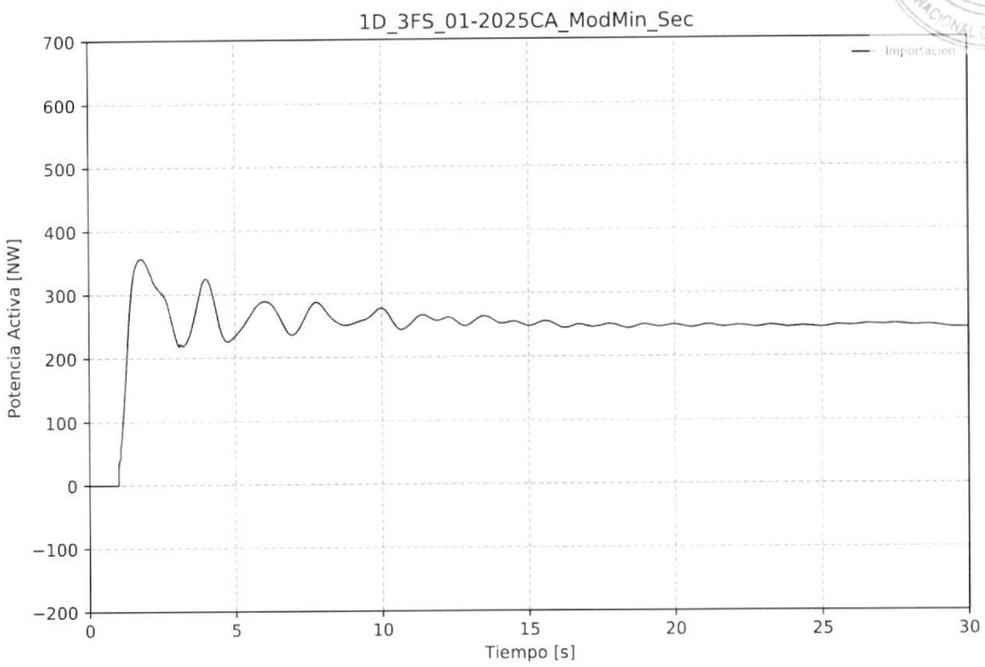

1D_3FS_01-2025CA_ModMedPm_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

5681


1D_3FS_01-2025CA_ModMin_Sec
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]


1D_3FS_01-2025CA_ModMin_Sec
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

5682


1D_3FS_01-2025CA_ModMin_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]
700
600
500
400
300
200
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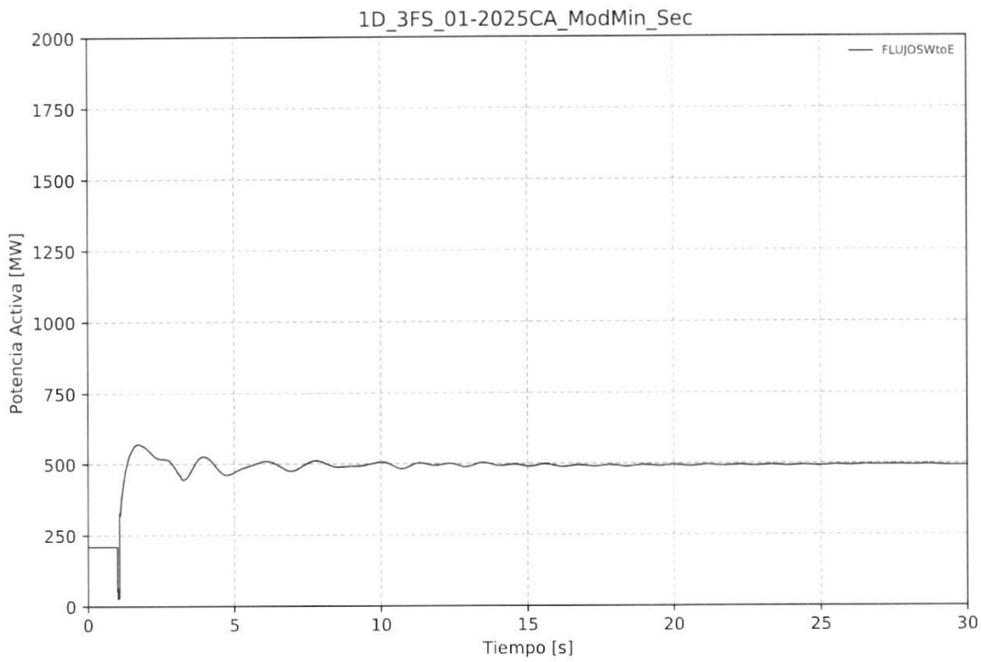
5
10
15
20
25
30


1D_3FS_01-2025CA_ModMin_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]
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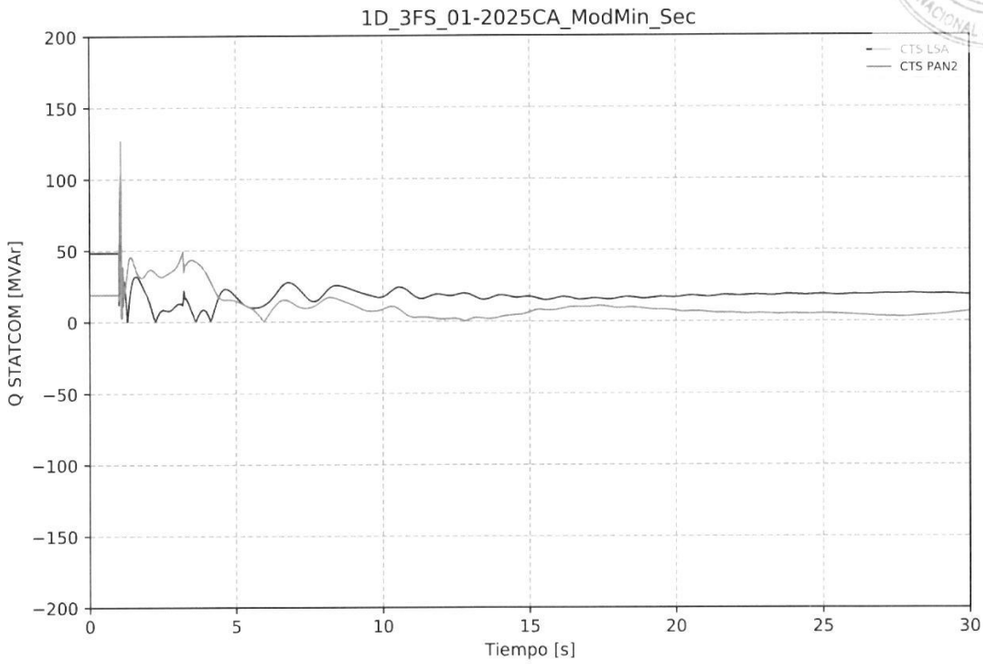
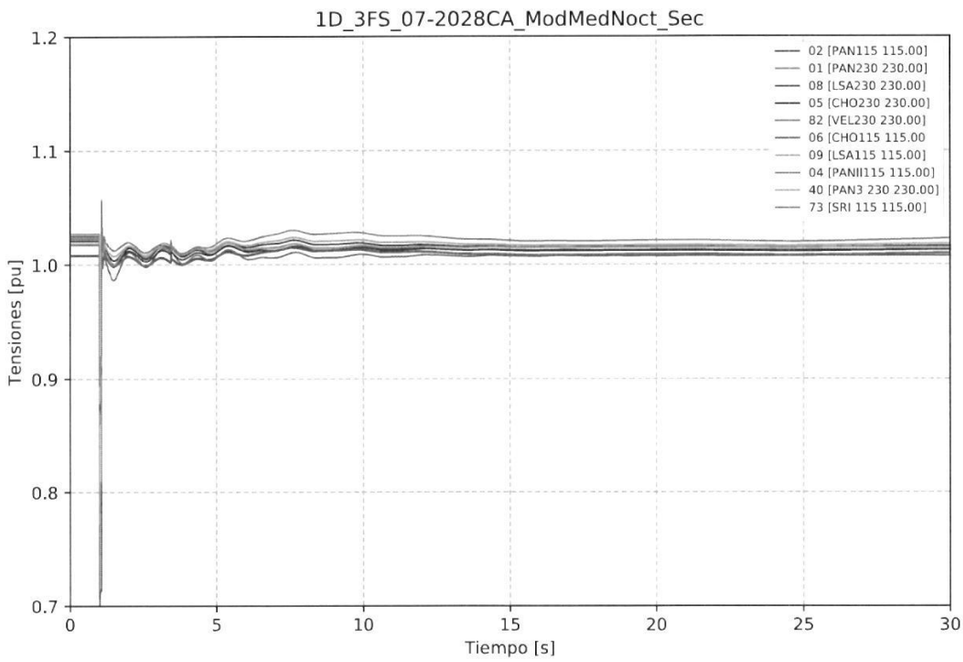
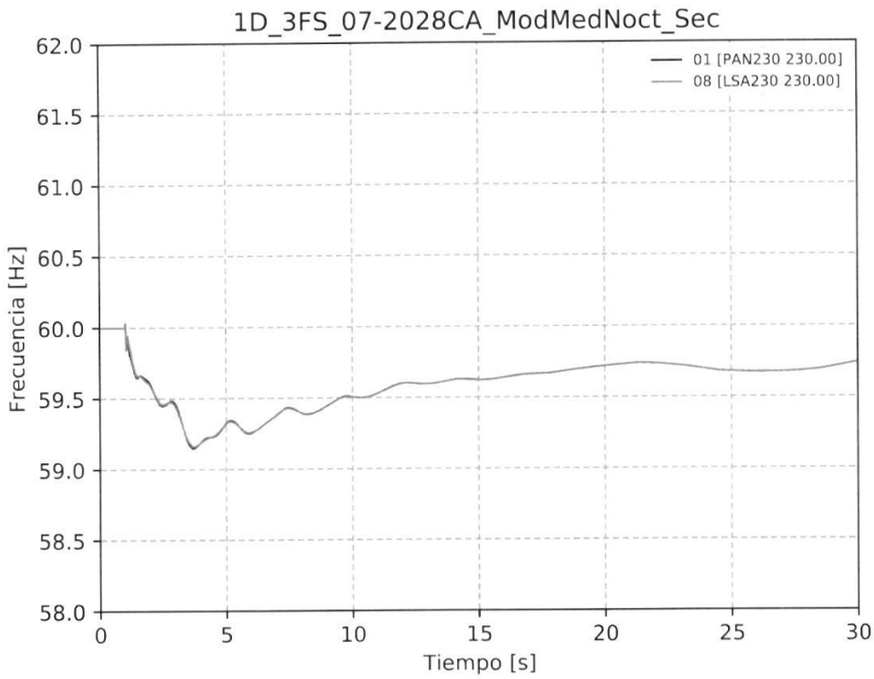
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30

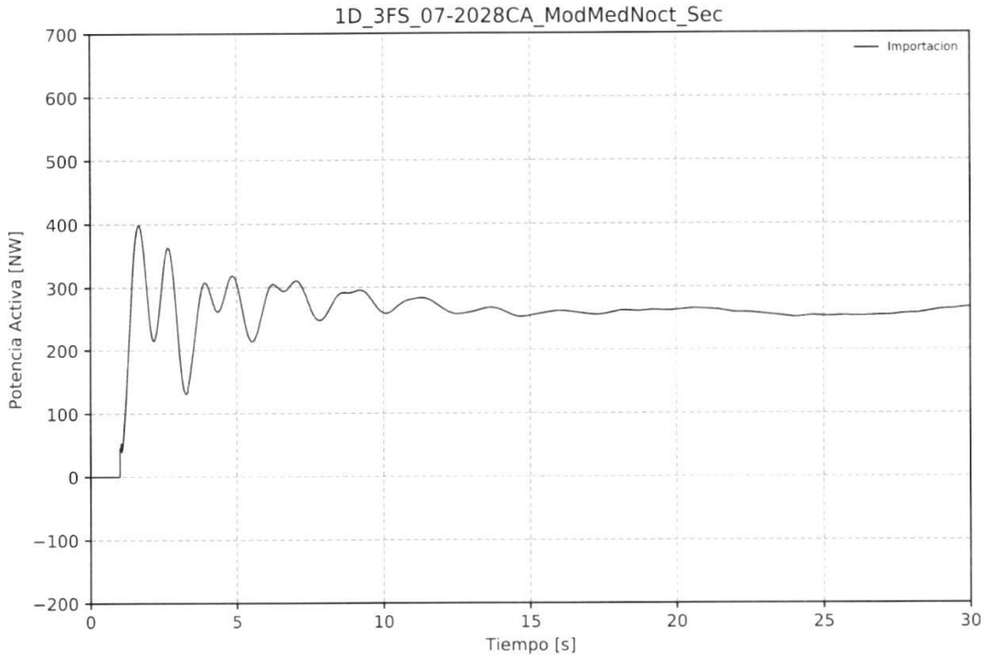
5683


1D_3FS_01-2025CA_ModMin_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

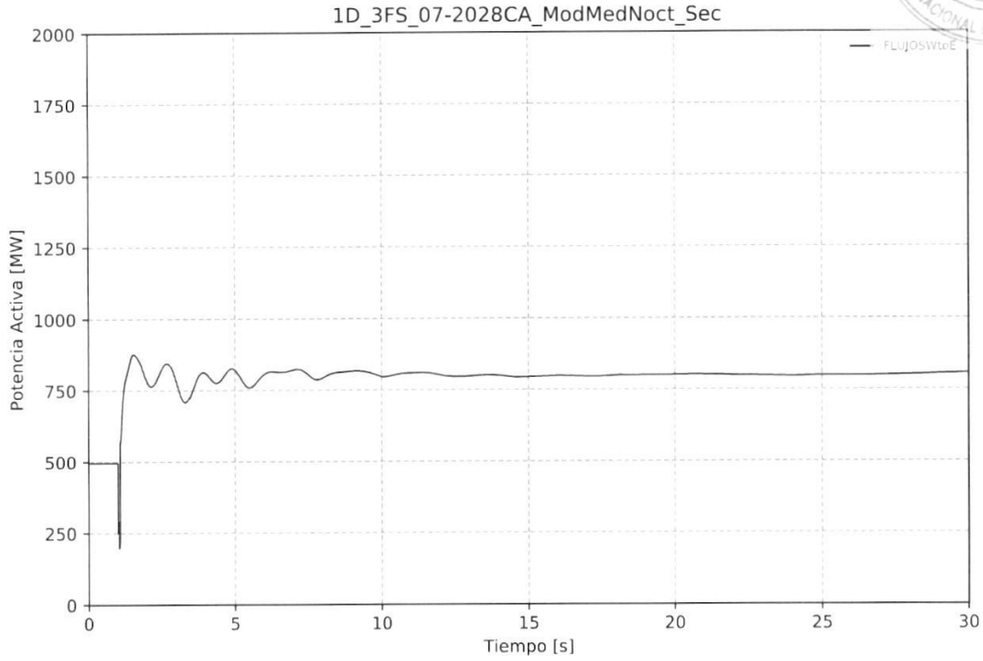

1D_3FS_07-2028CA_ModMedNoct_Sec
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

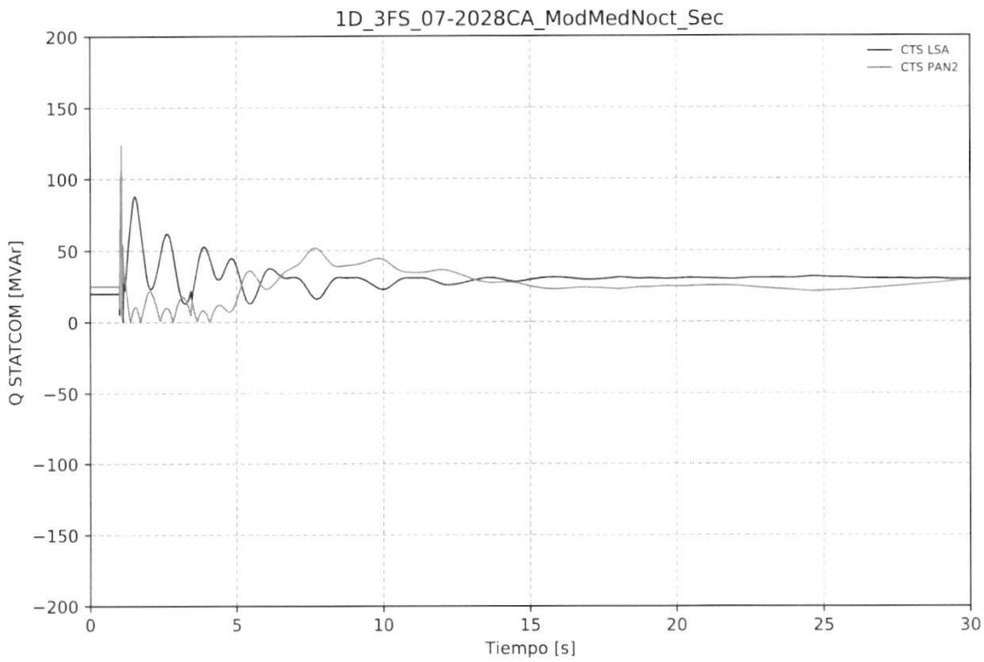
5684


1D_3FS_07-2028CA_ModMedNoct_Sec
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]


1D_3FS_07-2028CA_ModMedNoct_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]

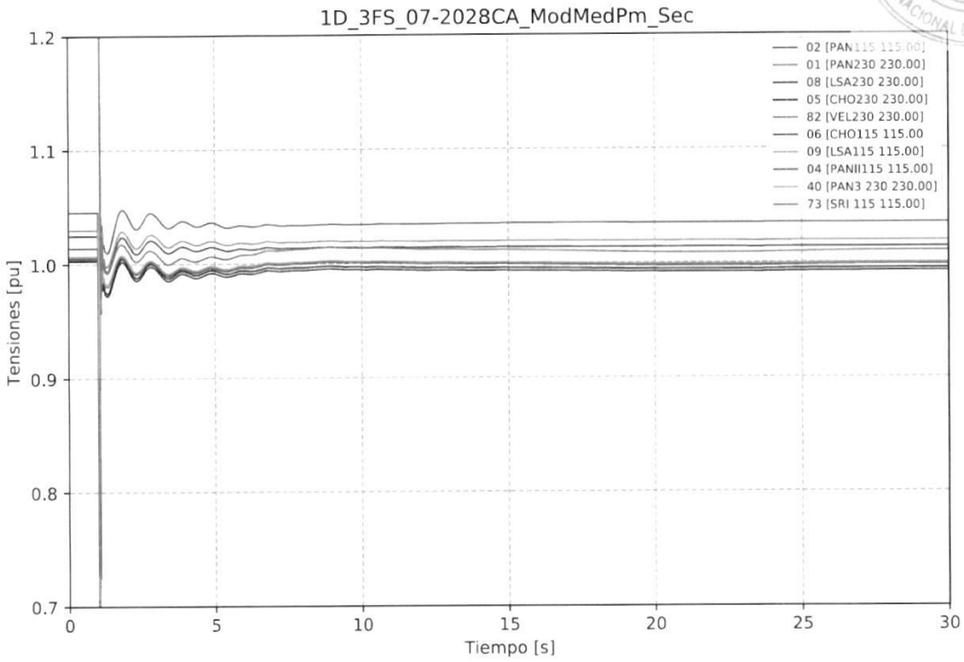
5685

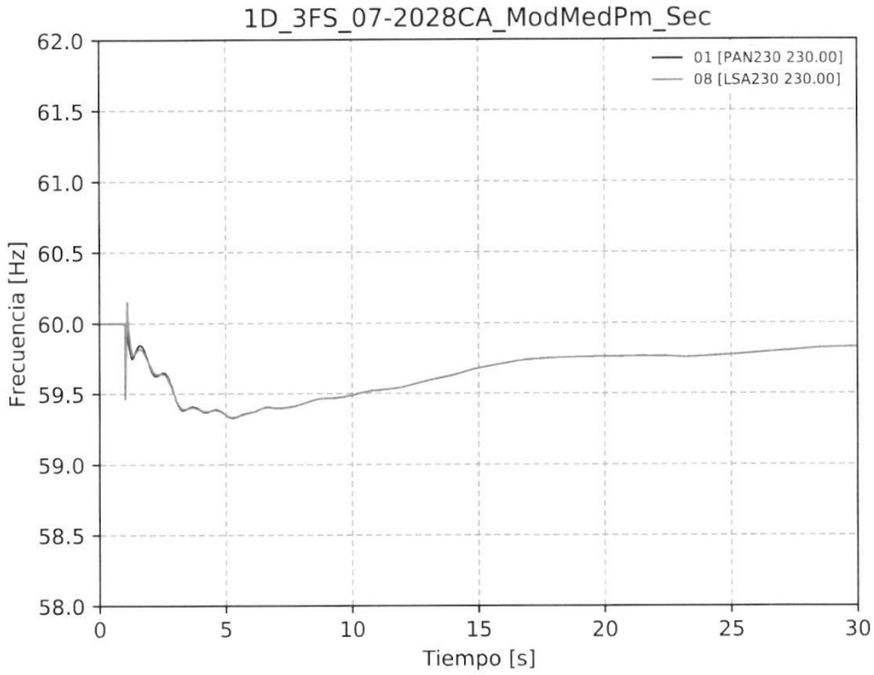

1D_3FS_07-2028CA_ModMedNoct_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]


1D_3FS_07-2028CA_ModMedNoct_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

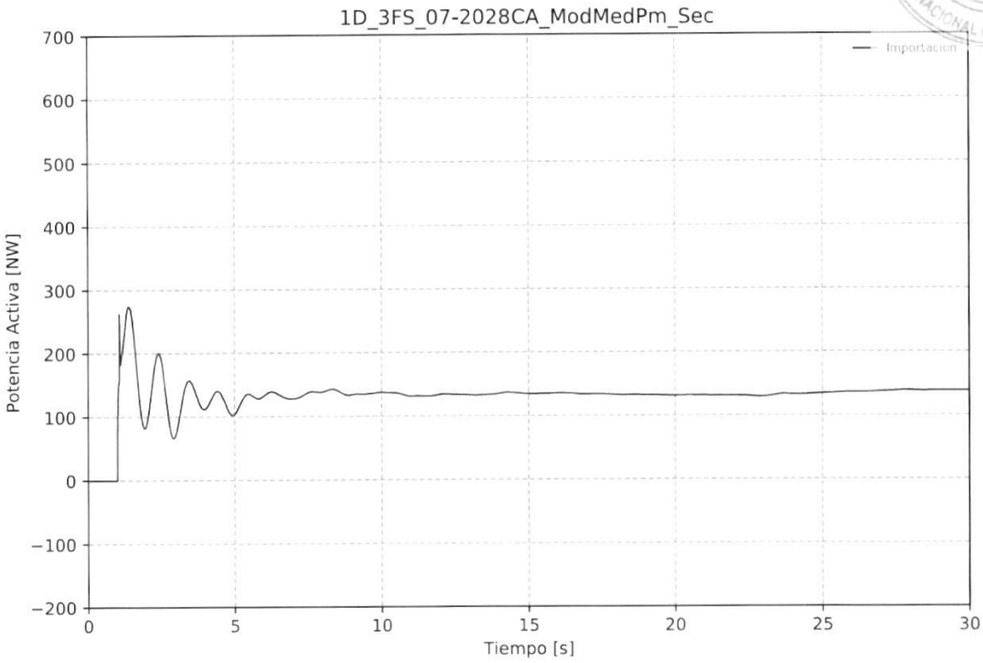
REPUBLICA DE PANAMA
AUTORIDAD NACIONAL DE LOS SERVICIOS PUBLICOS

5686





5687


1D_3FS_07-2028CA_ModMedPm_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]
700
600
500
400
300
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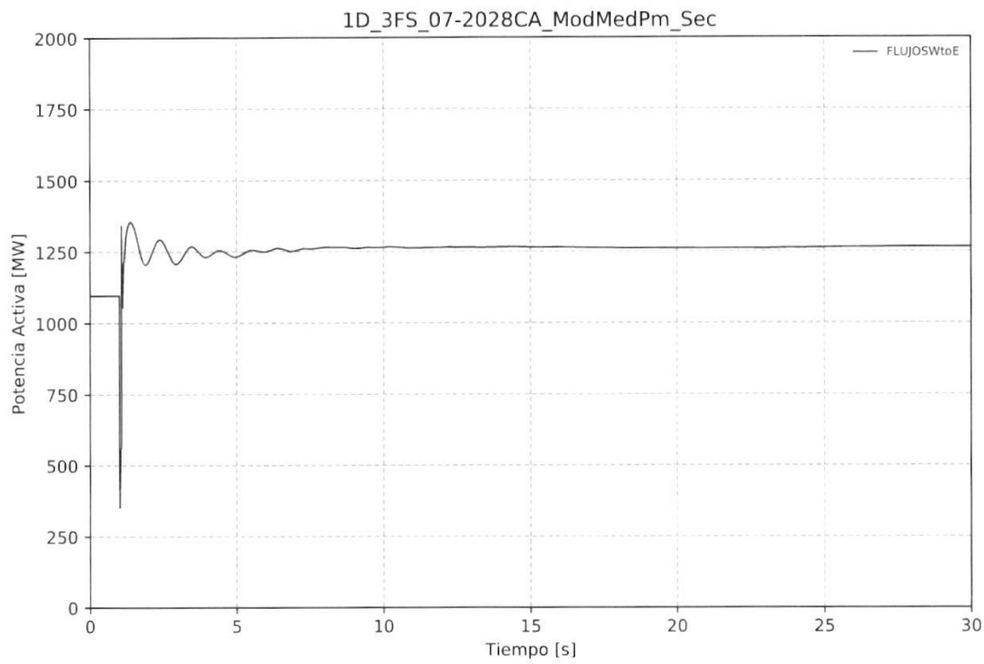
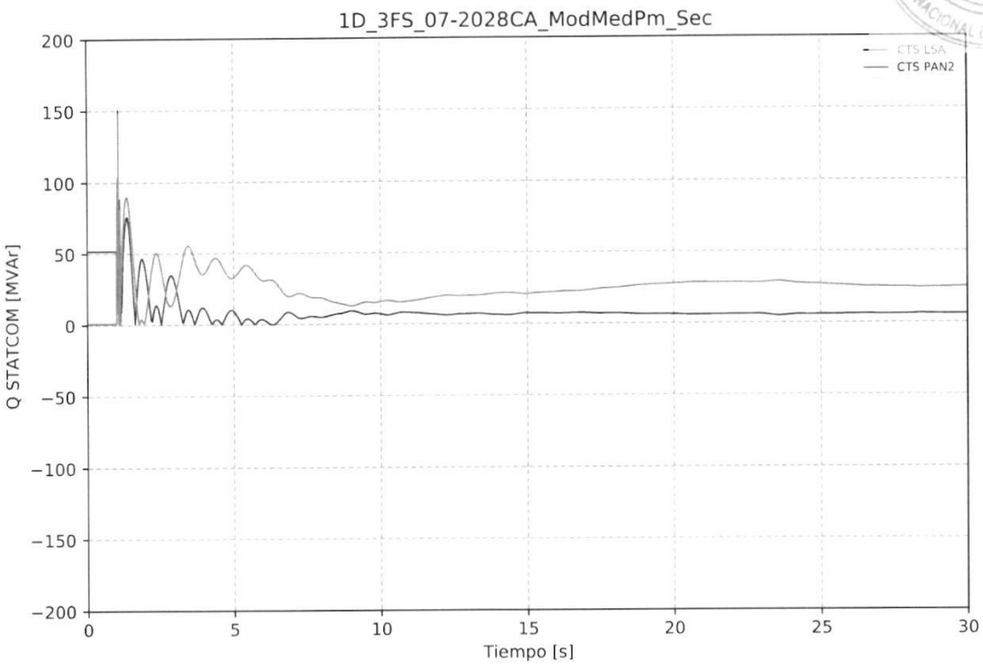
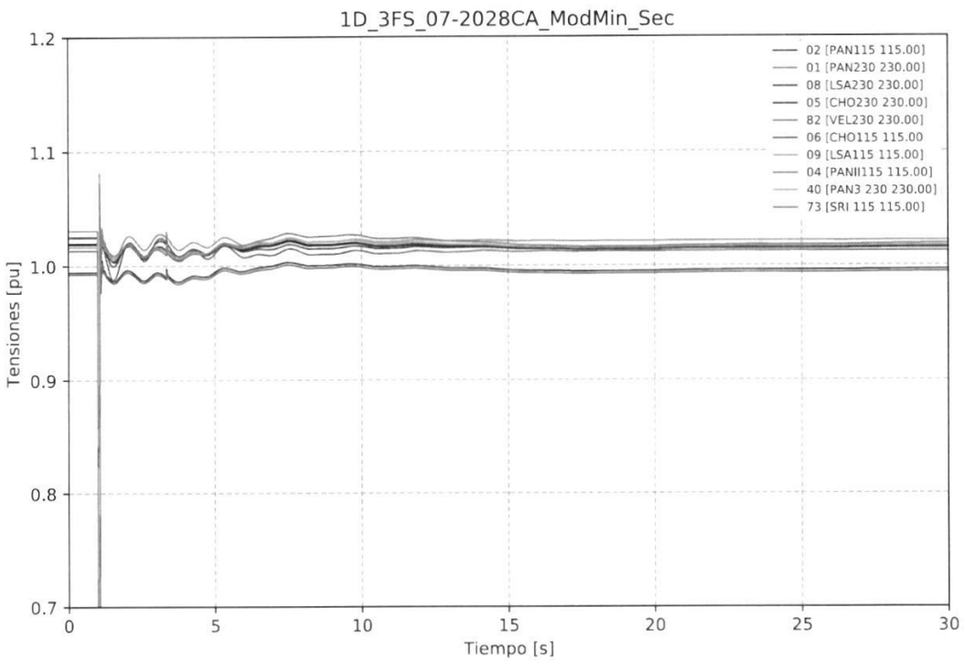
5
10
15
20
25
30

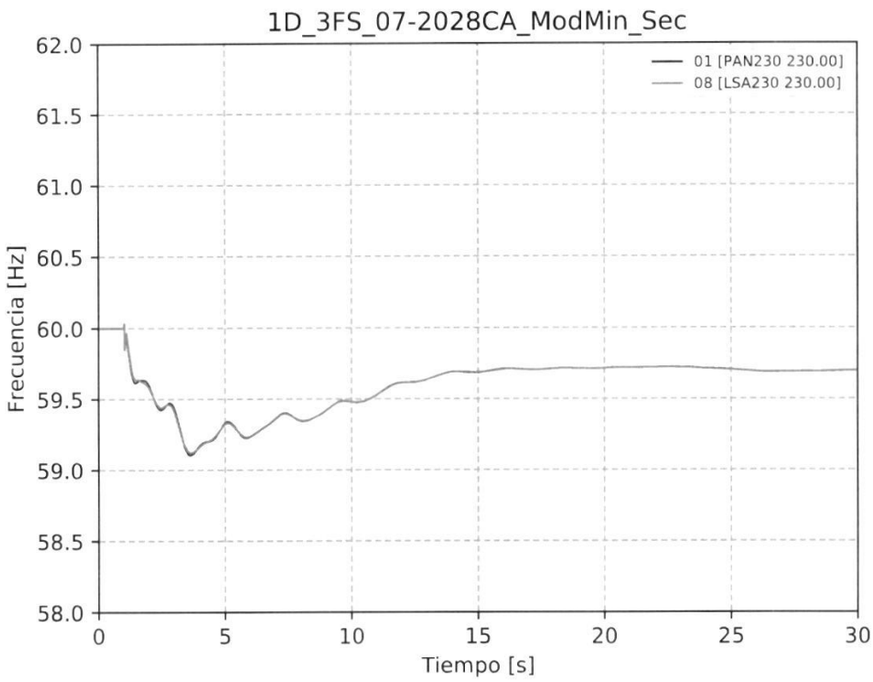

1D_3FS_07-2028CA_ModMedPm_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30

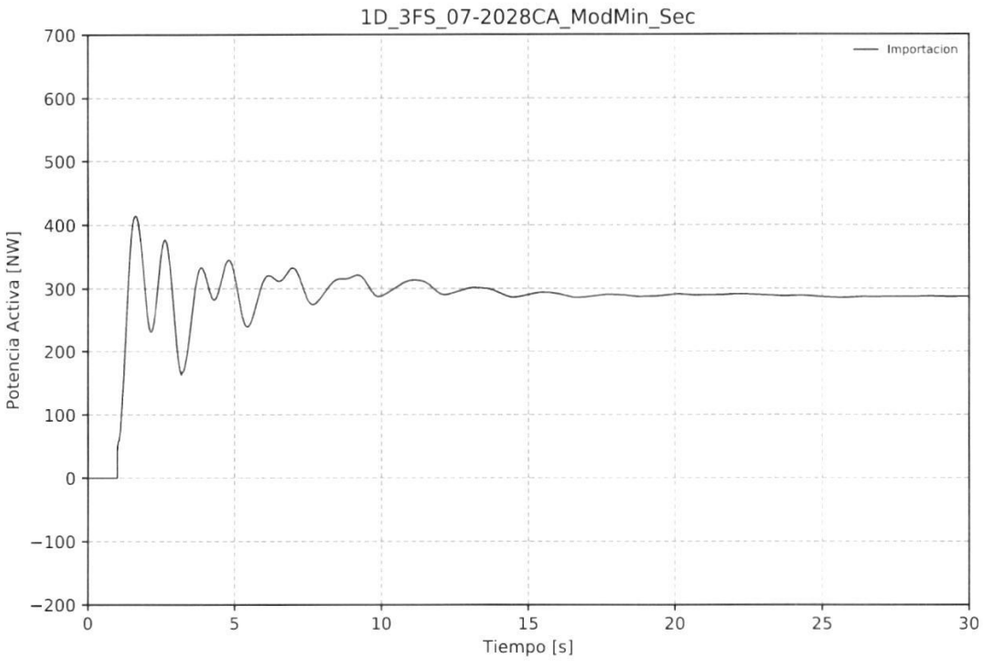
5688


1D_3FS_07-2028CA_ModMedPm_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

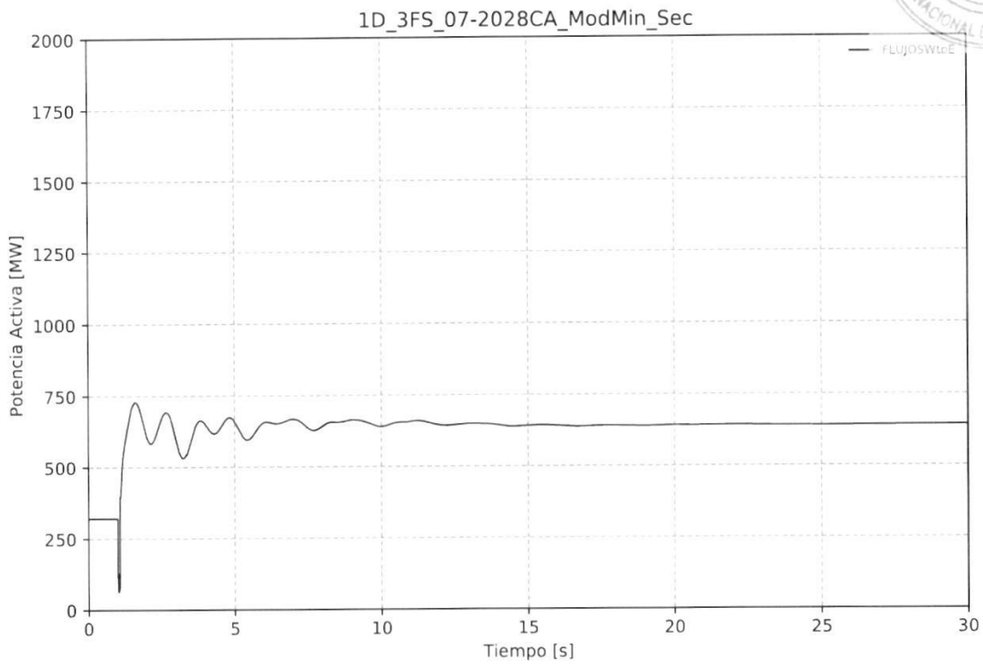

1D_3FS_07-2028CA_ModMin_Sec
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

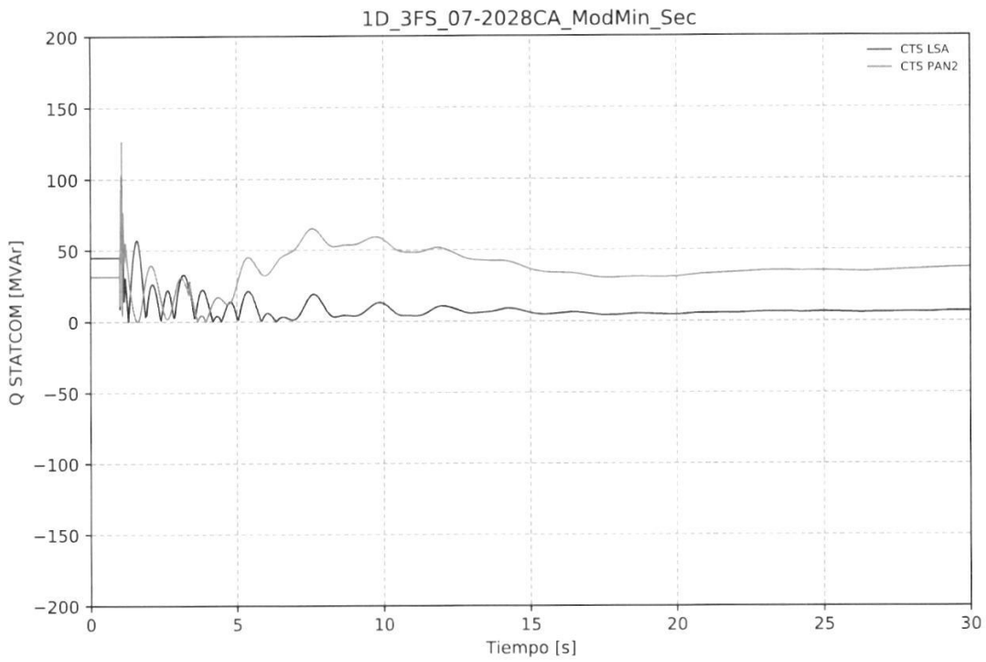
5689


1D_3FS_07-2028CA_ModMin_Sec
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

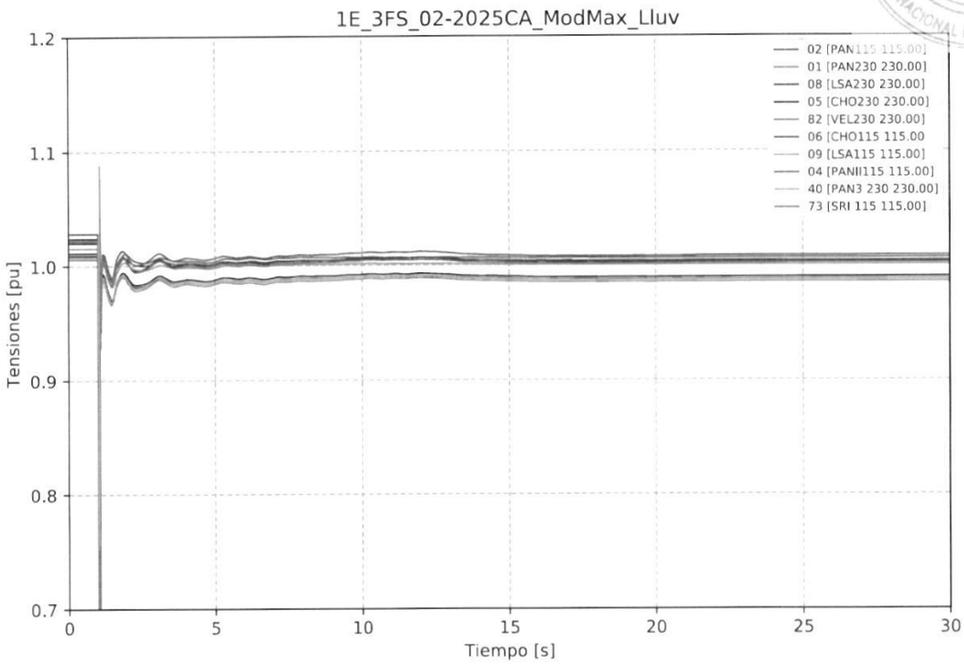

1D_3FS_07-2028CA_ModMin_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]

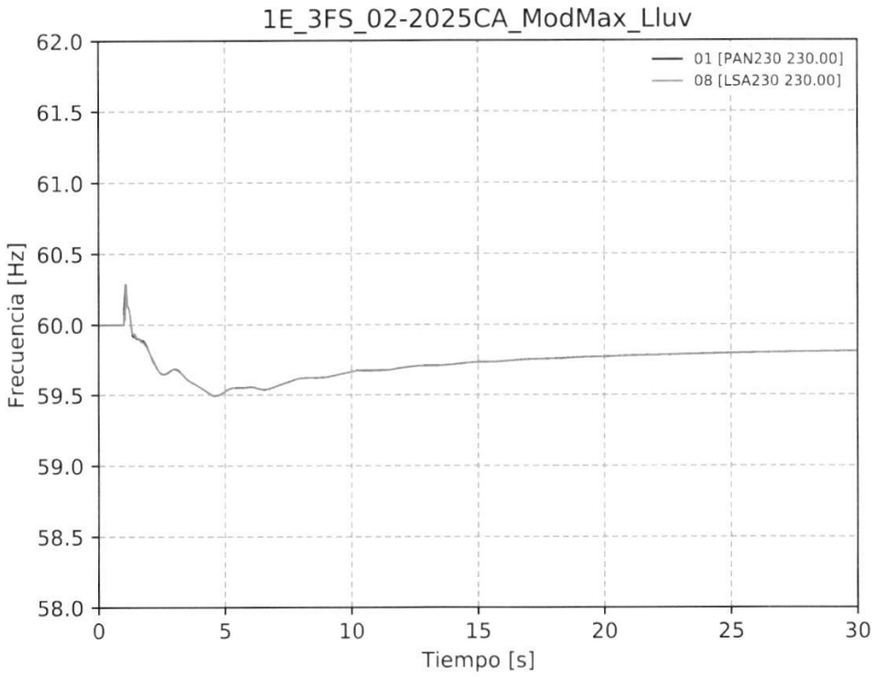
5690


1D_3FS_07-2028CA_ModMin_Sec
Potencia Activa [MW]
Tiempo [s]
FLUJOSWtoE

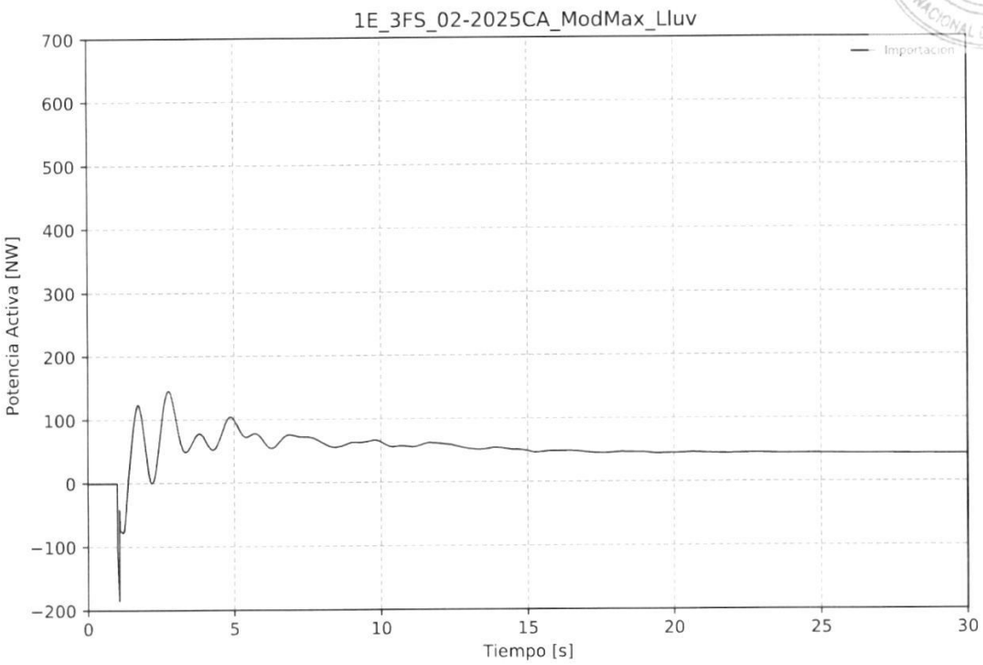

1D_3FS_07-2028CA_ModMin_Sec
Q STATCOM [MVAr]
Tiempo [s]
CTS LSA
CTS PAN2

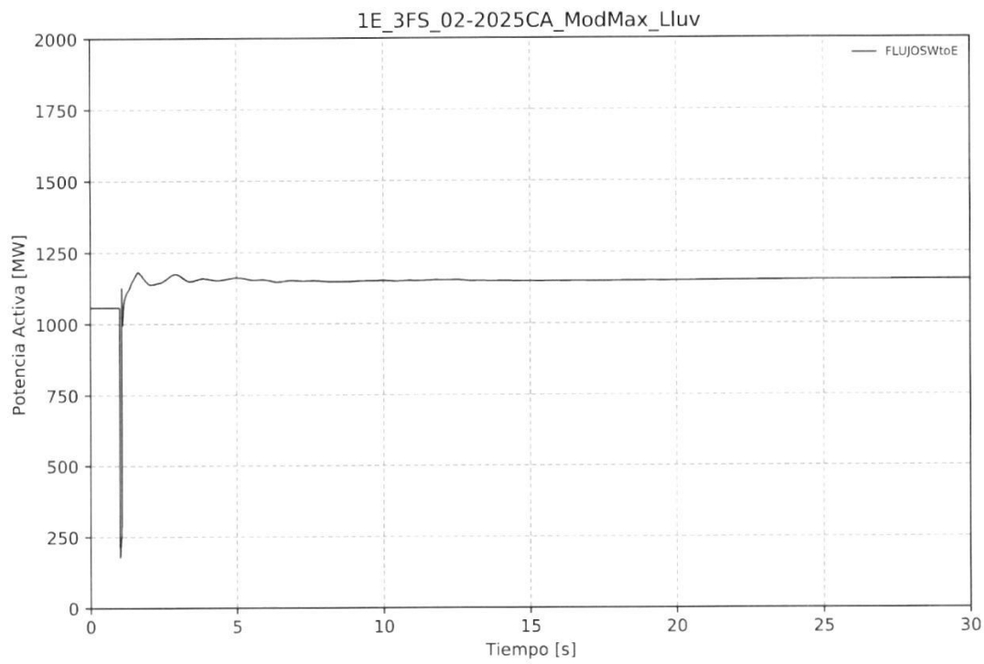
5691


1E_3FS_02-2025CA_ModMax_Lluv
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]


1E_3FS_02-2025CA_ModMax_Lluv
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

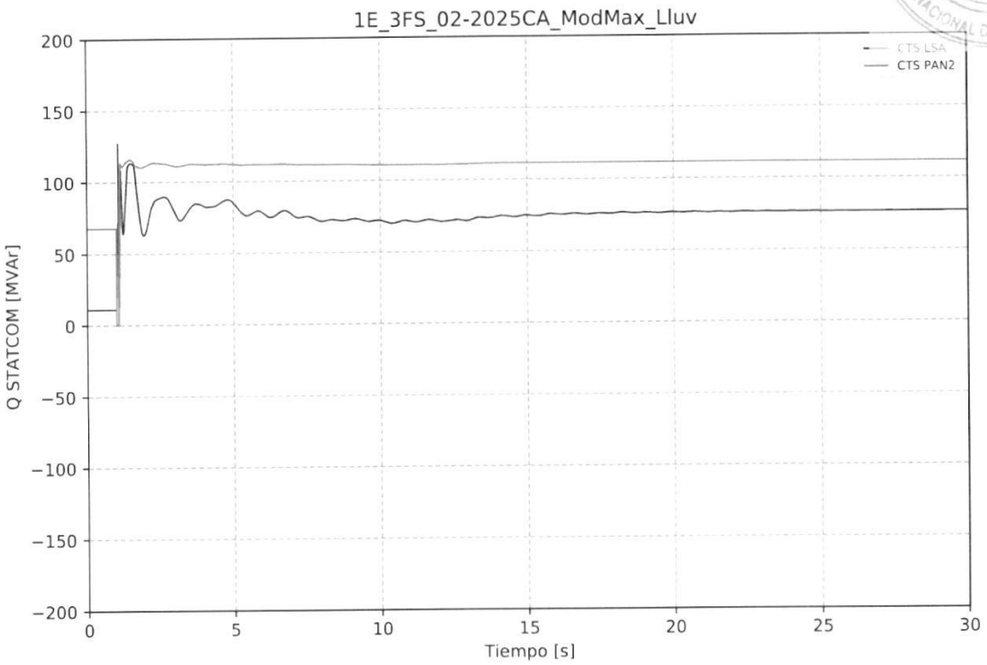
5692

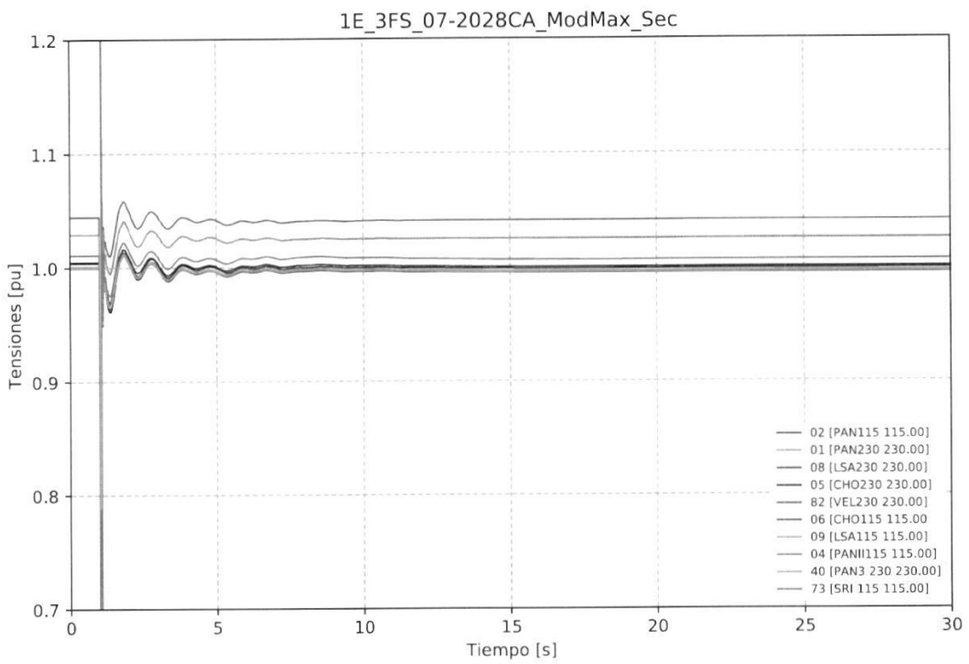

1E_3FS_02-2025CA_ModMax_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30


1E_3FS_02-2025CA_ModMax_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30

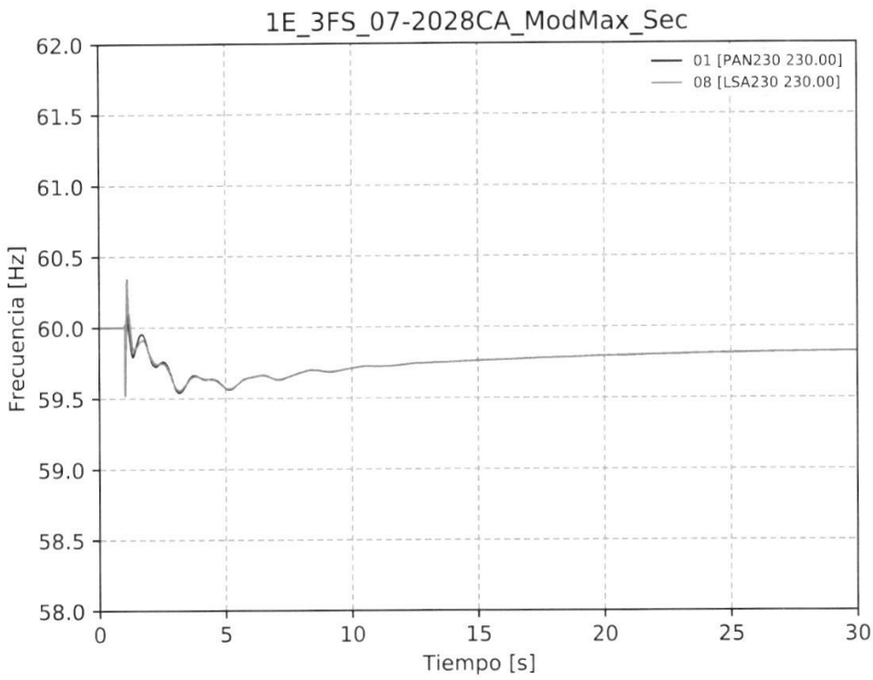
REPUBLICA DE PANAMA
AUTORIDAD NACIONAL DE LOS SERVICIOS PUBLICOS

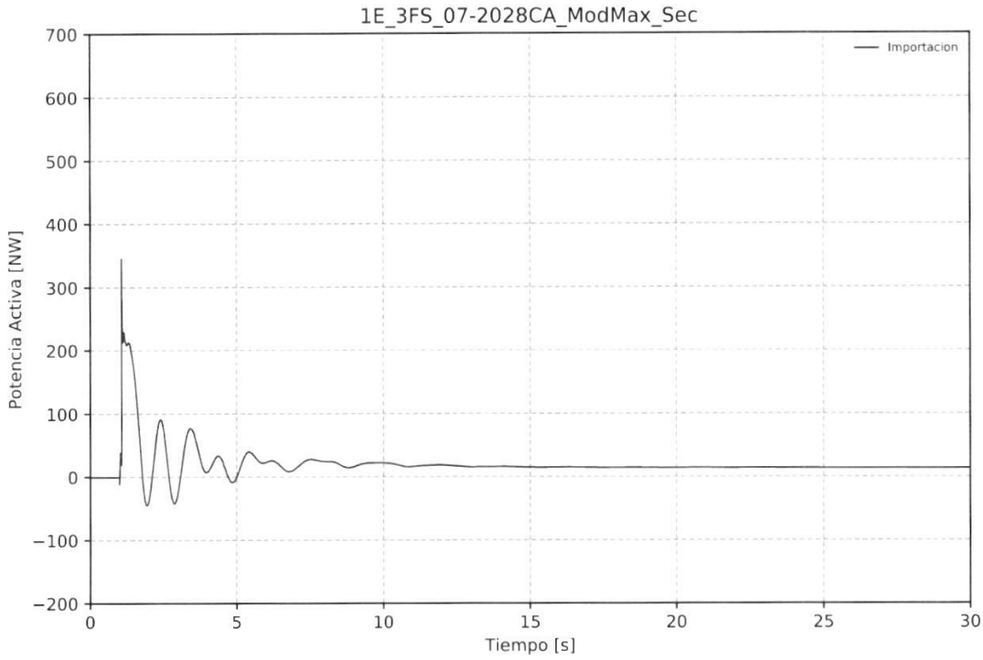
5693



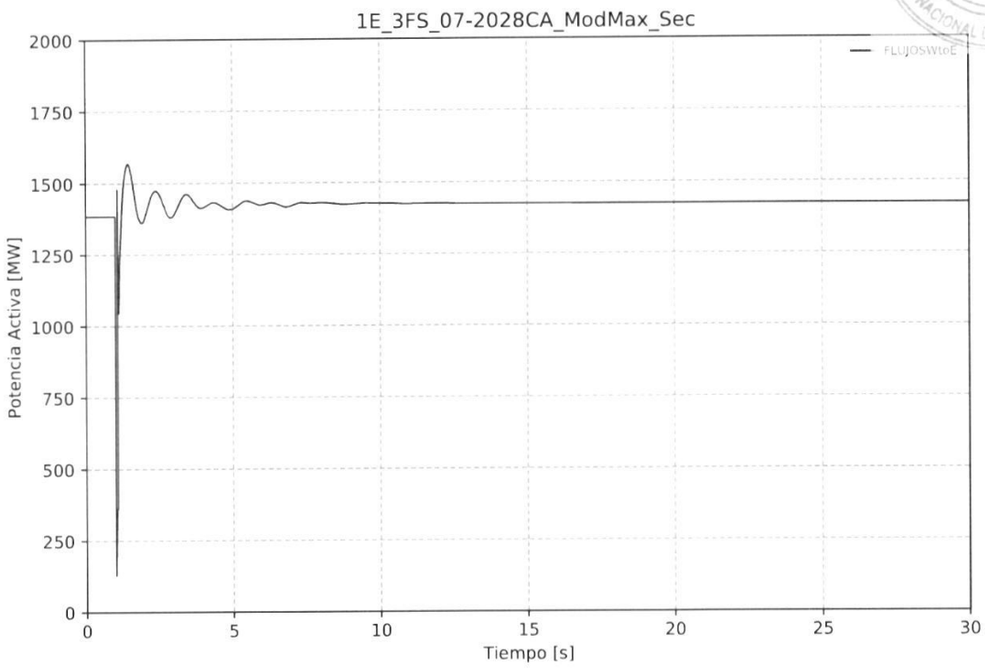


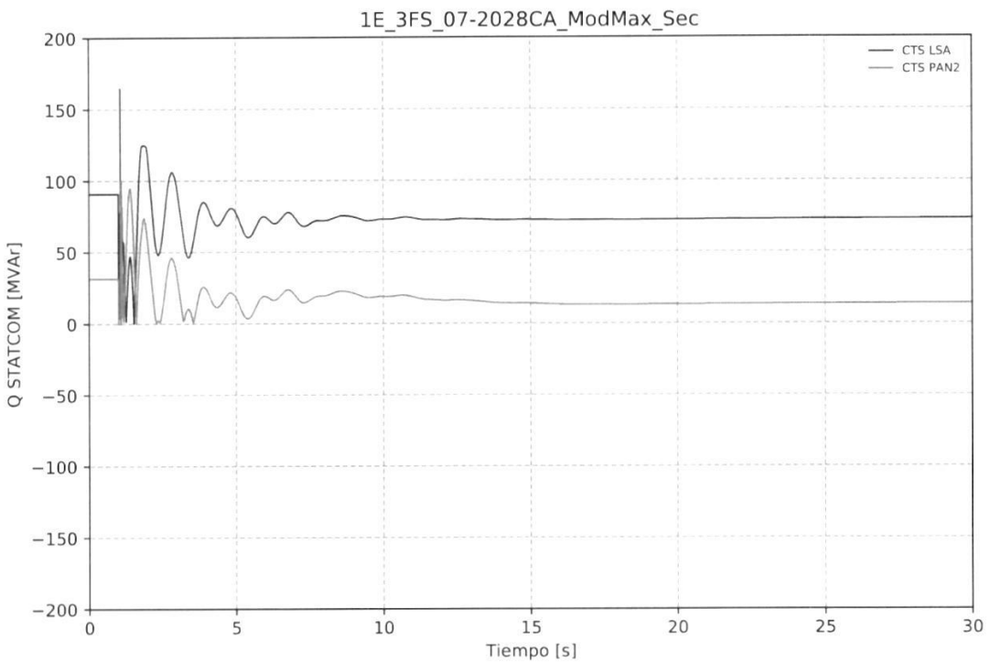
5694


1E_3FS_07-2028CA_ModMax_Sec
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

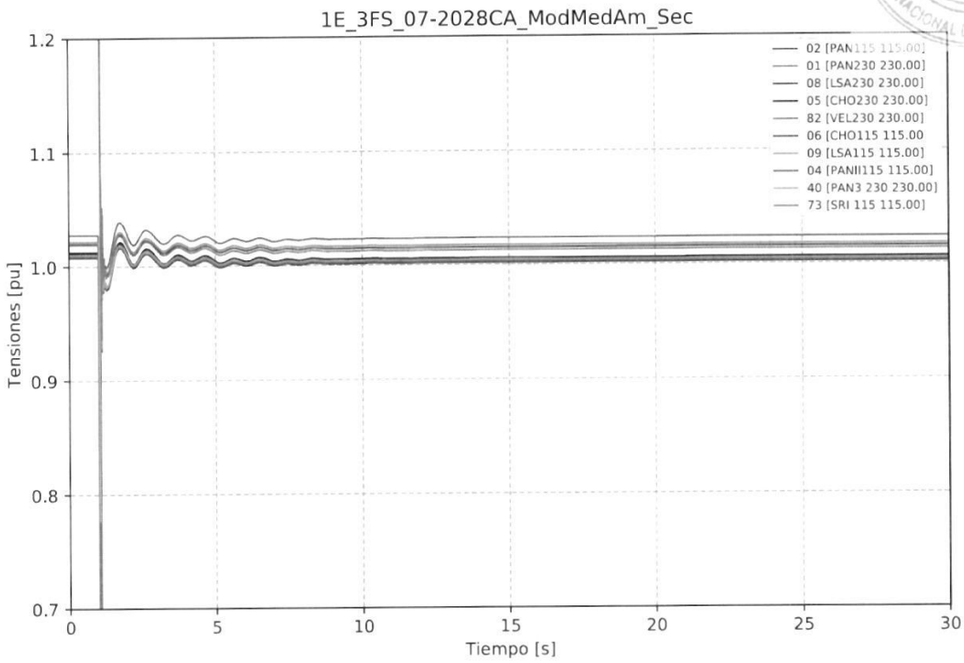

1E_3FS_07-2028CA_ModMax_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]

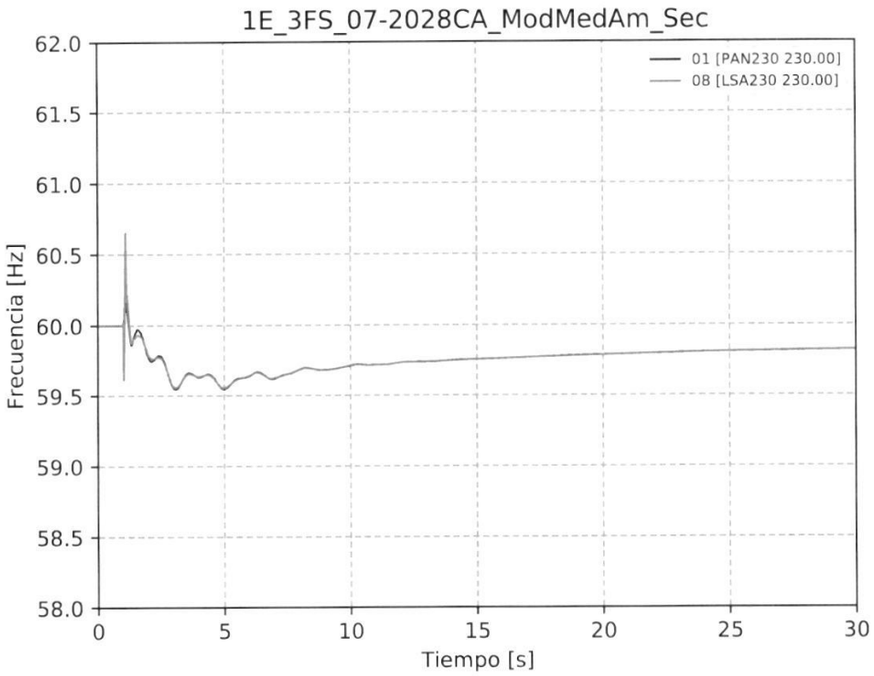
5695


1E_3FS_07-2028CA_ModMax_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

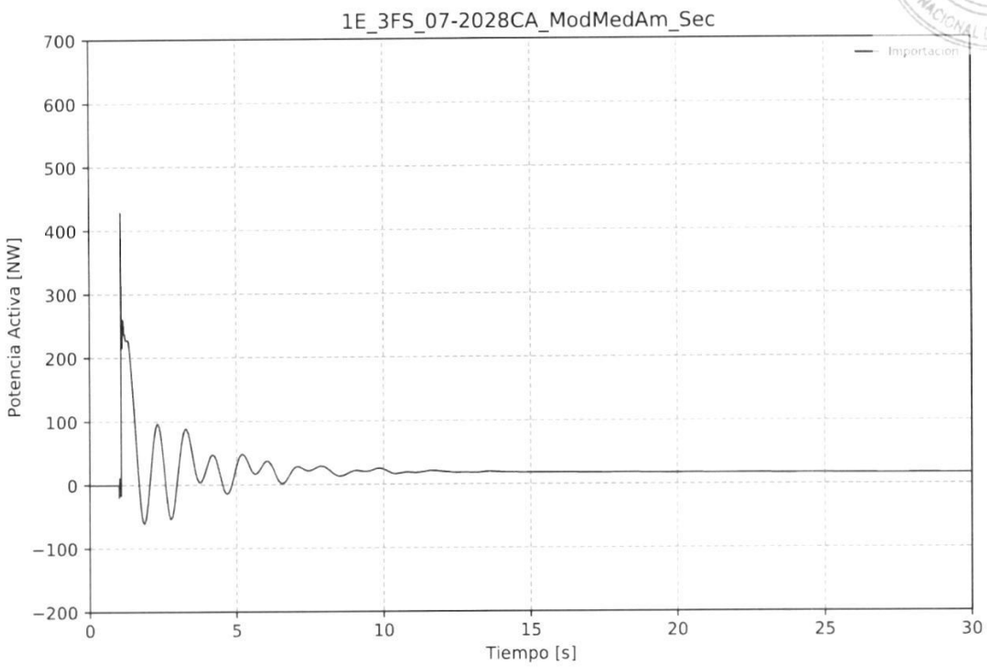

1E_3FS_07-2028CA_ModMax_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

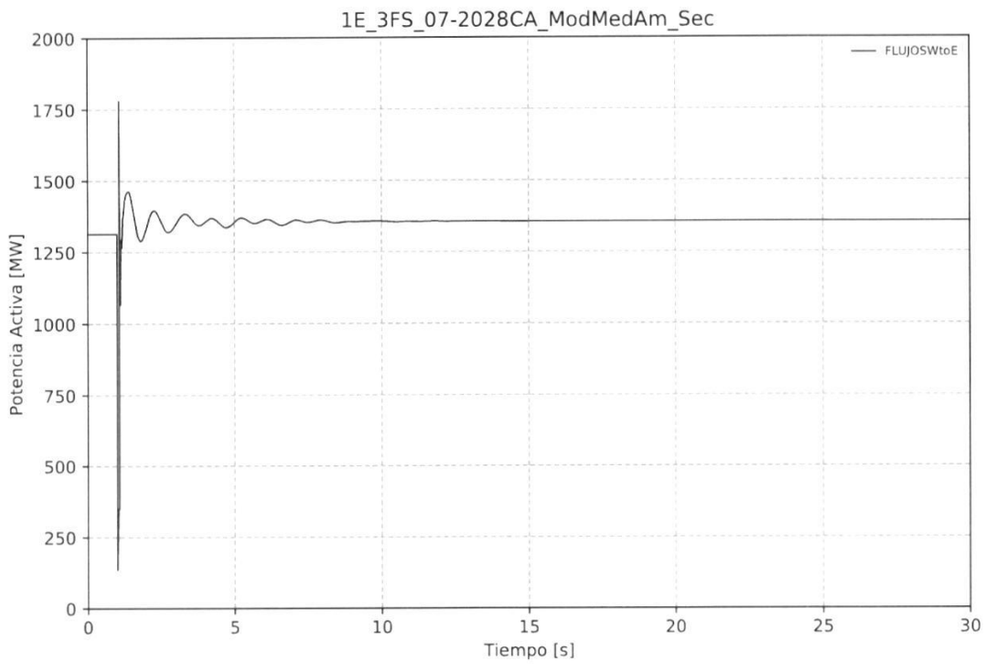
5696


1E_3FS_07-2028CA_ModMedAm_Sec
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANI115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

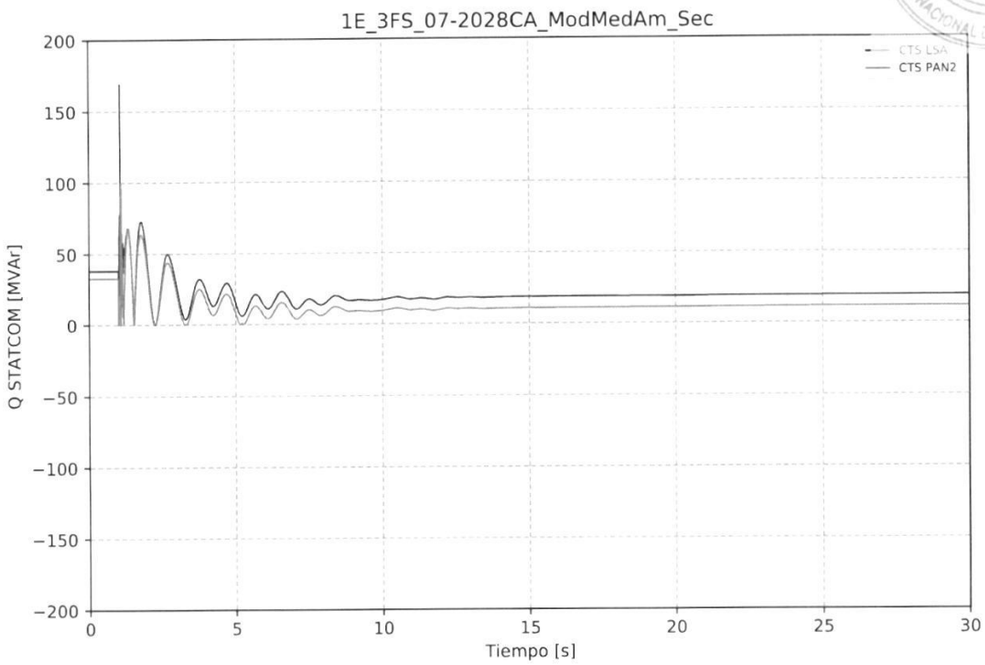

1E_3FS_07-2028CA_ModMedAm_Sec
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

5697


1E_3FS_07-2028CA_ModMedAm_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]

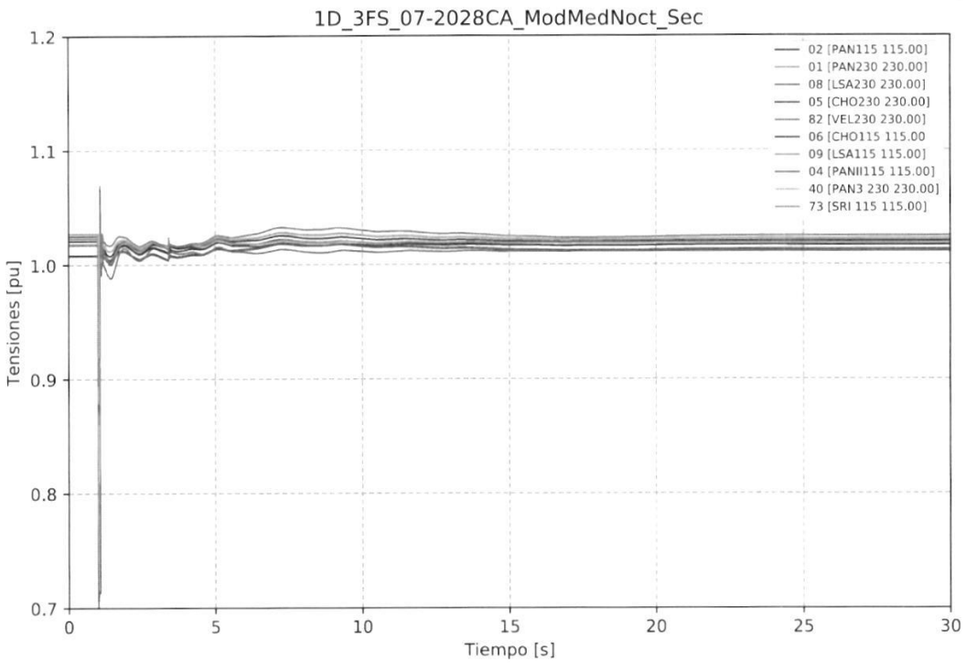

1E_3FS_07-2028CA_ModMedAm_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

5698

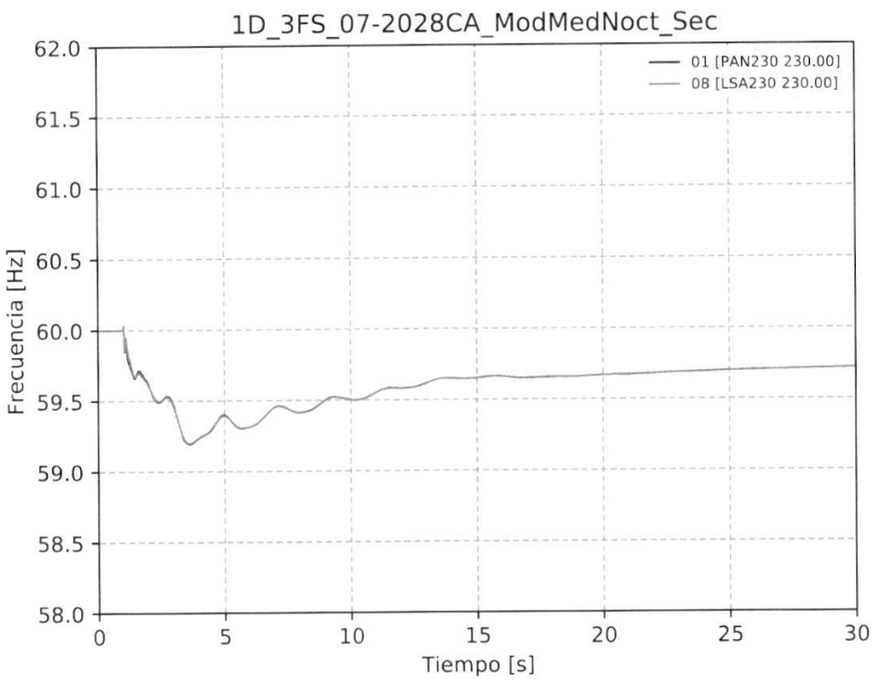

1E_3FS_07-2028CA_ModMedAm_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]
200
150
100
50
0
−50
−100
−150
−200
0
5
10
15
20
25
30

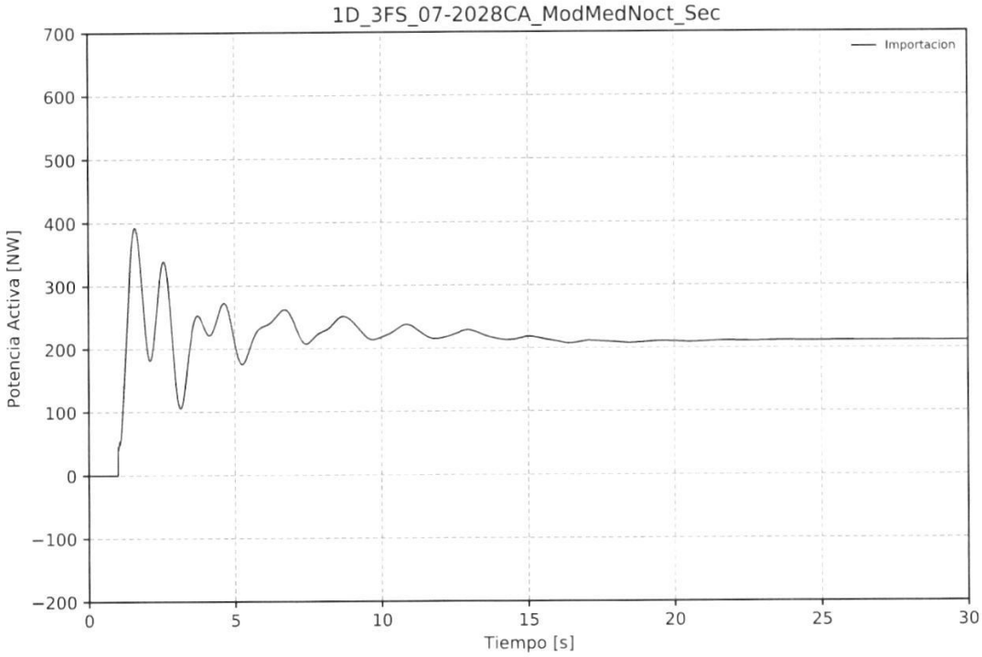
5699

3. FALLAS DE GENERACIÓN + DISPARO DE MÉXICO + BESS

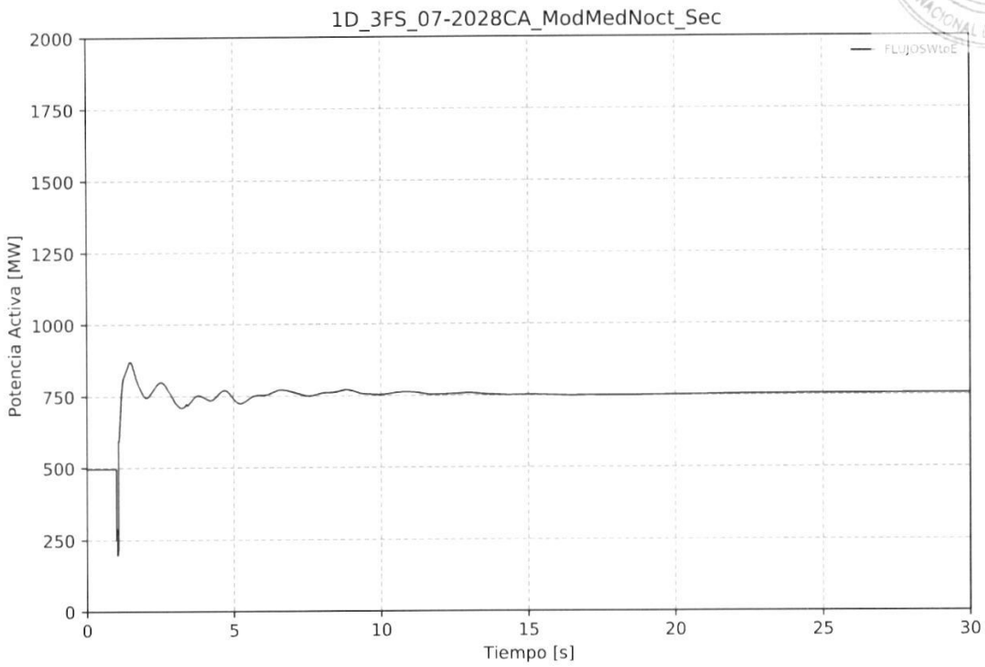


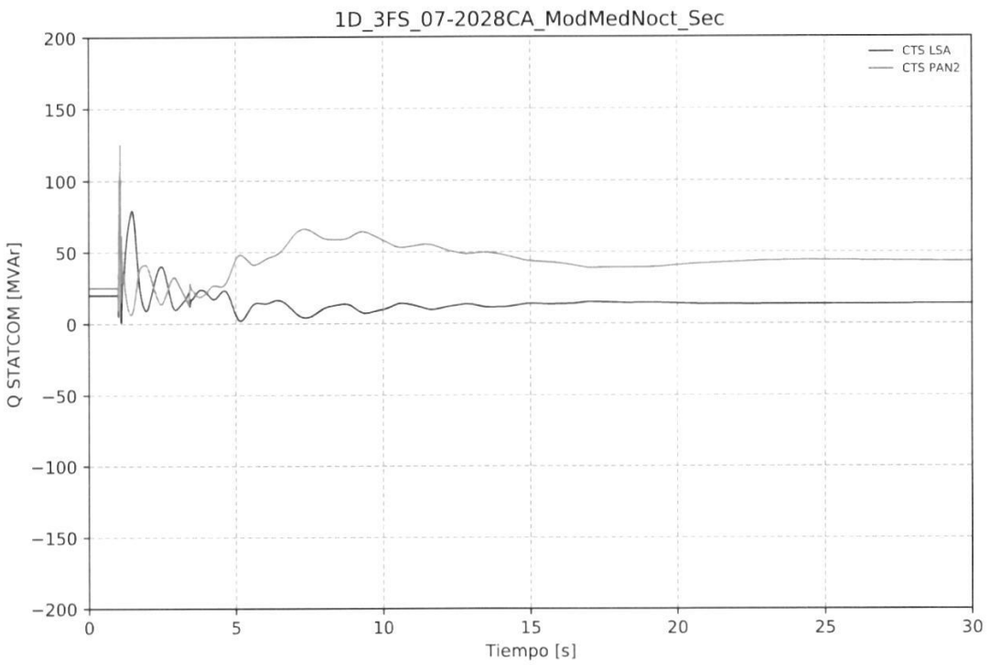
5700


1D_3FS_07-2028CA_ModMedNoct_Sec
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

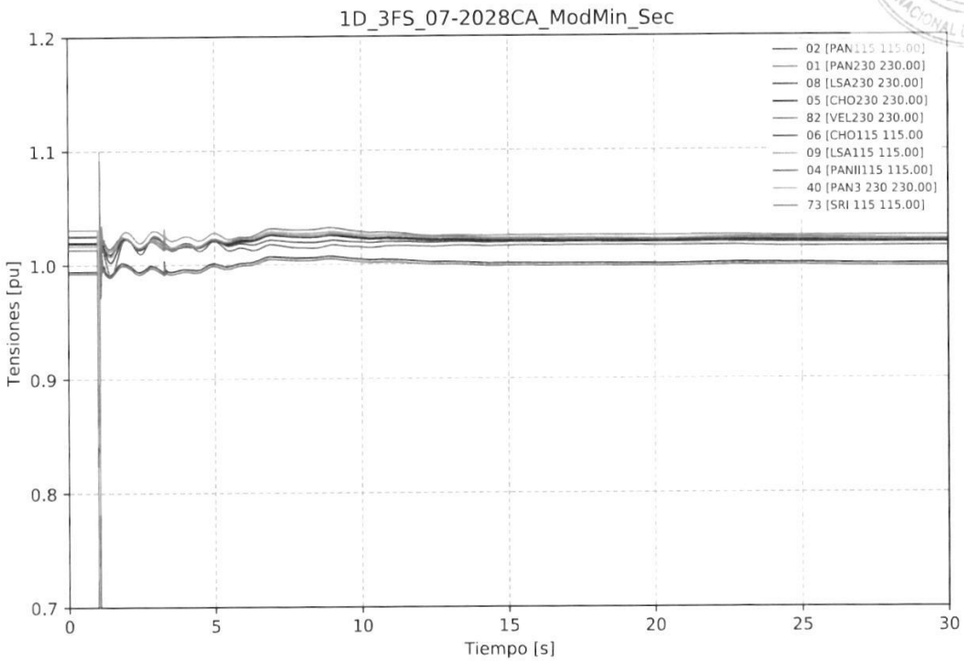

1D_3FS_07-2028CA_ModMedNoct_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]

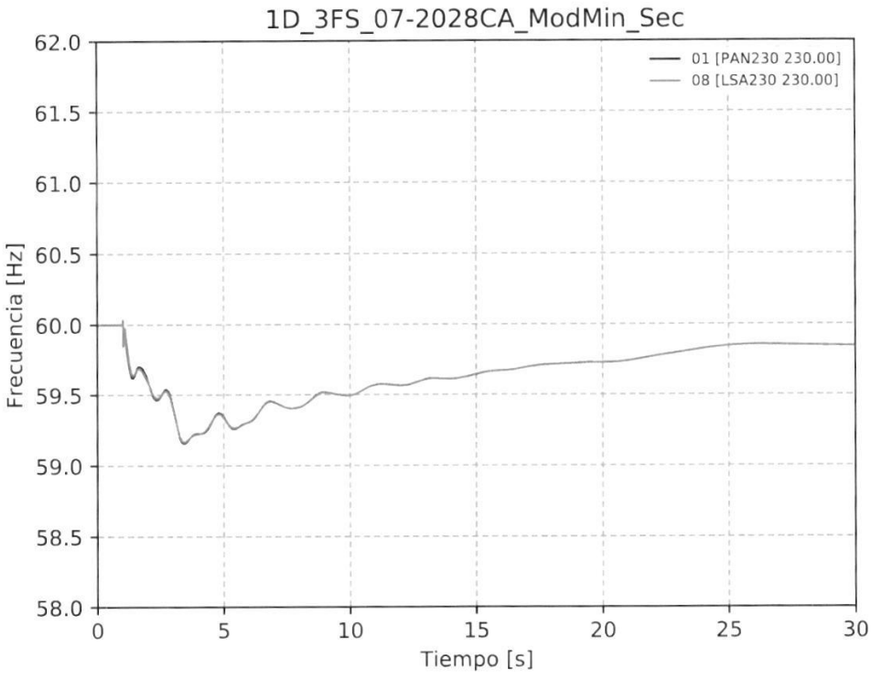
5701


1D_3FS_07-2028CA_ModMedNoct_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

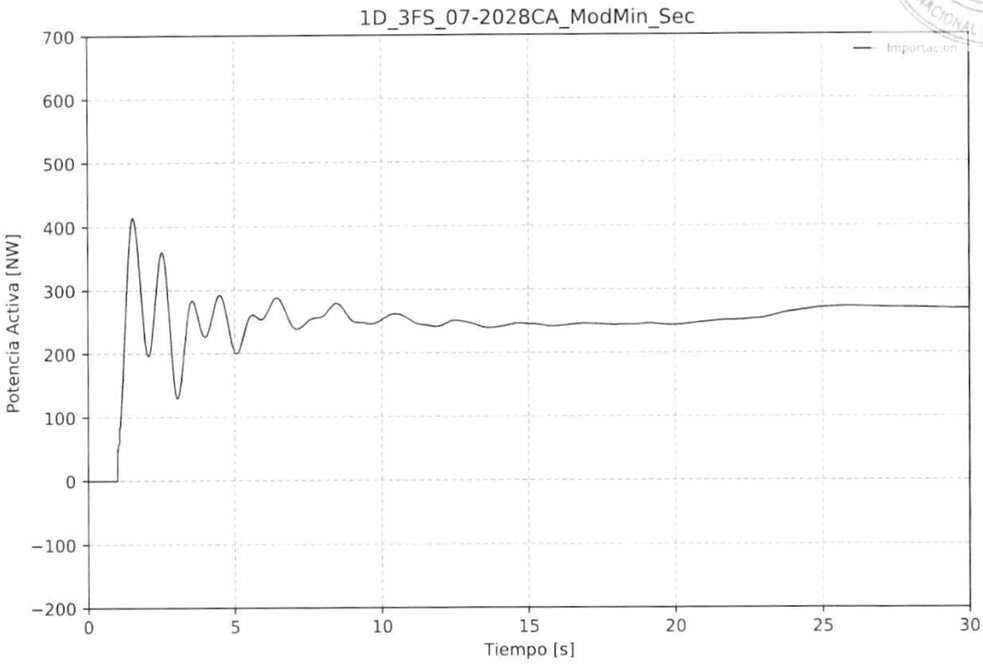

1D_3FS_07-2028CA_ModMedNoct_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

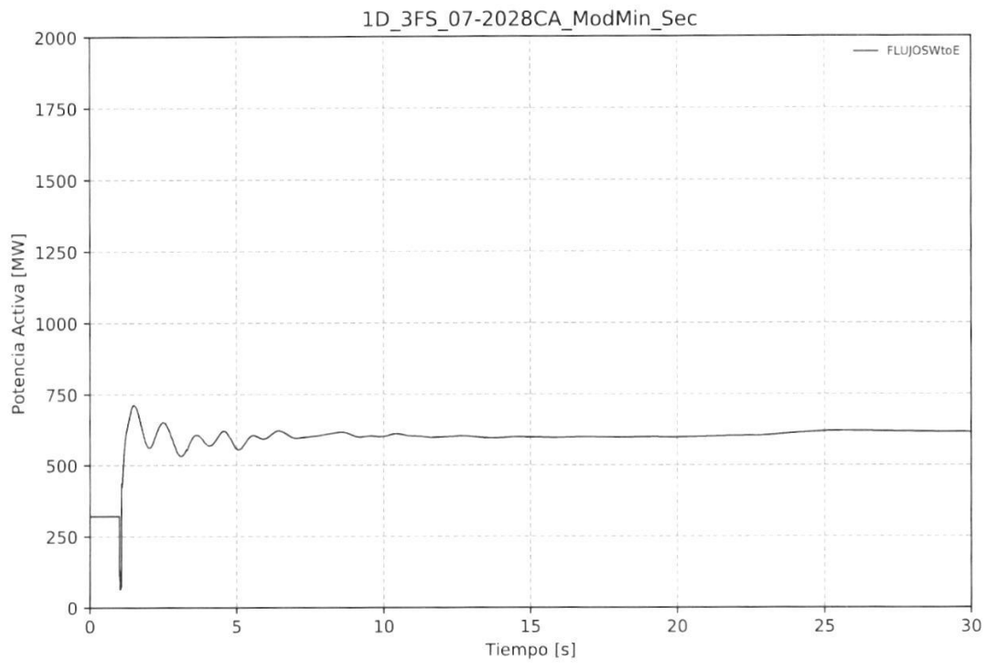
5702


1D_3FS_07-2028CA_ModMin_Sec
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

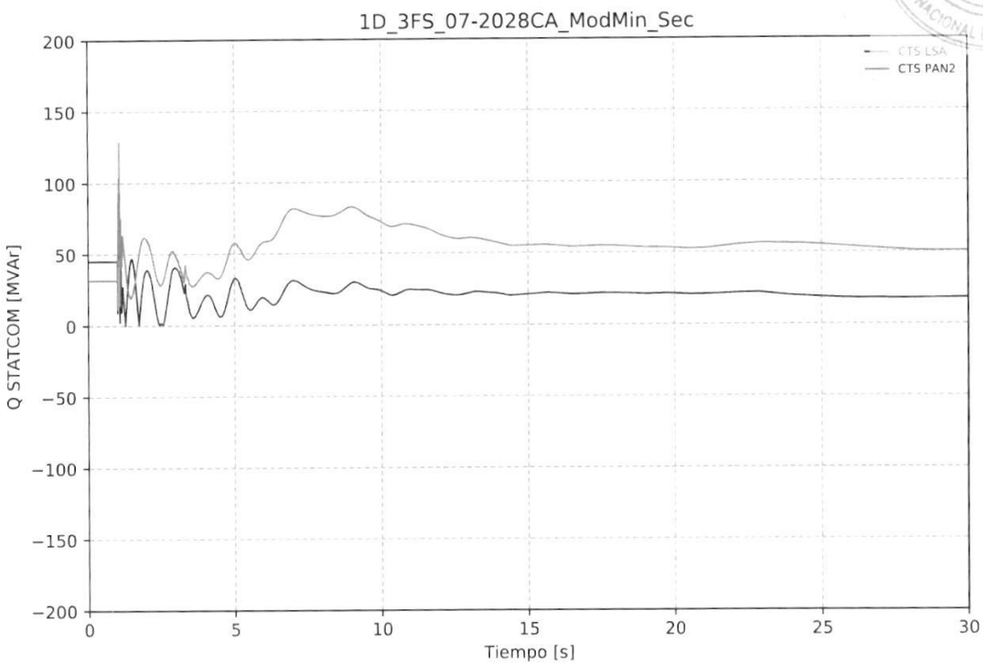

1D_3FS_07-2028CA_ModMin_Sec
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

5703


1D_3FS_07-2028CA_ModMin_Sec
Importacion
Potencia Activa [NW]
Tiempo [s]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30

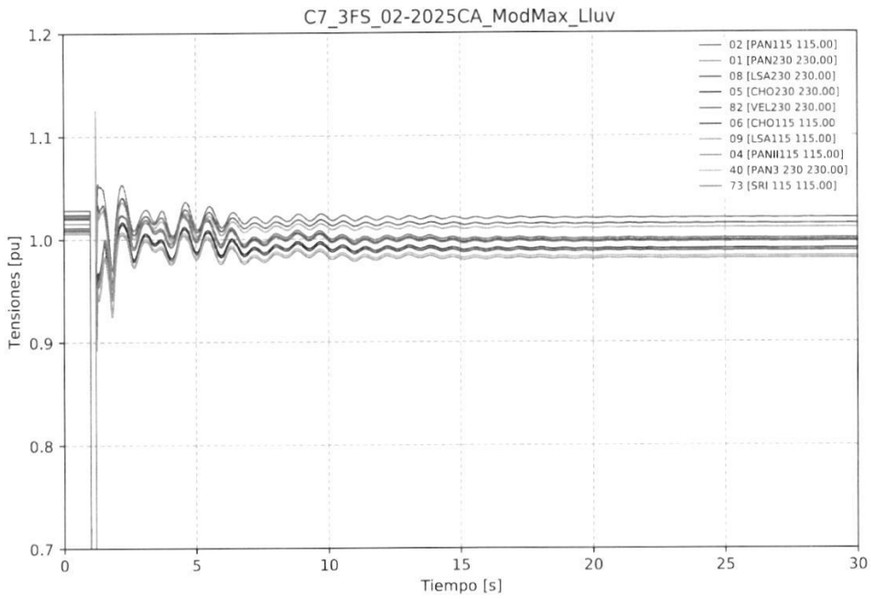

1D_3FS_07-2028CA_ModMin_Sec
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30

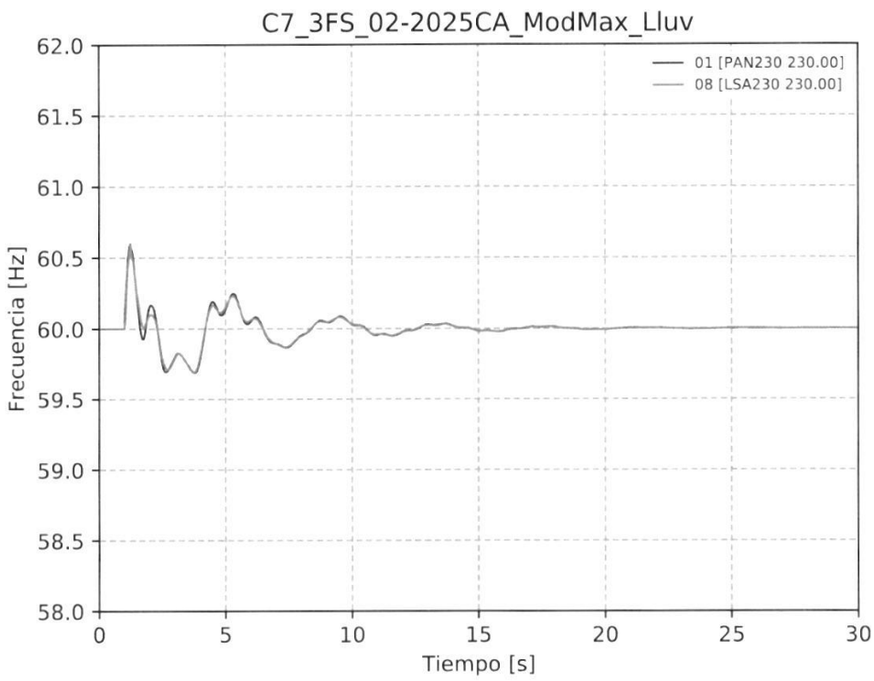
5704


1D_3FS_07-2028CA_ModMin_Sec
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]
200
150
100
50
0
−50
−100
−150
−200
0
5
10
15
20
25
30

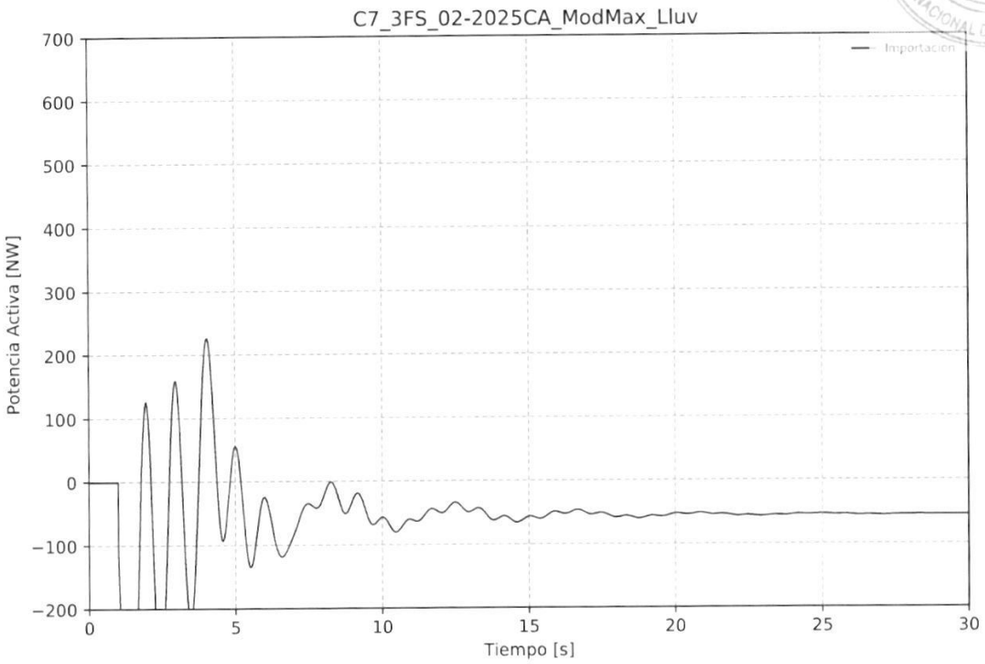
5705

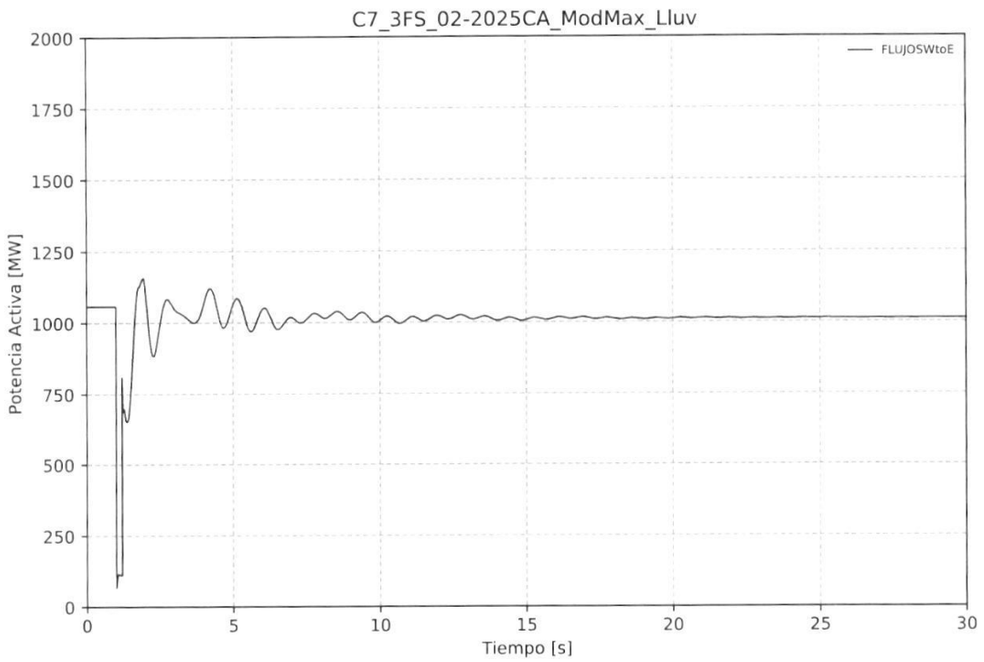
4. FALLAS DE ELEMENTOS DE COMPENSACIÓN REACTIVA



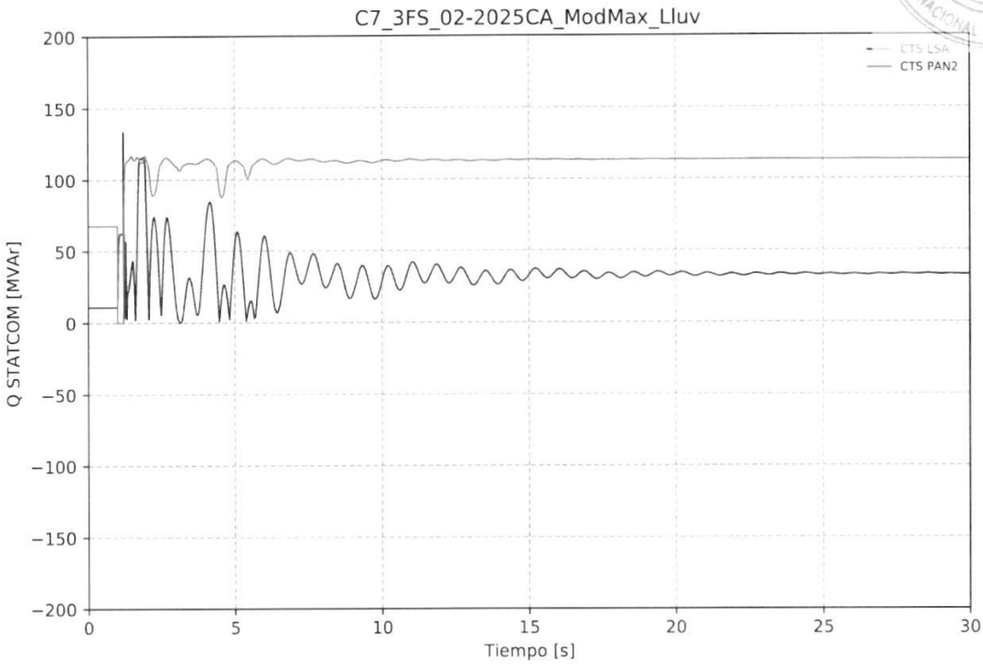


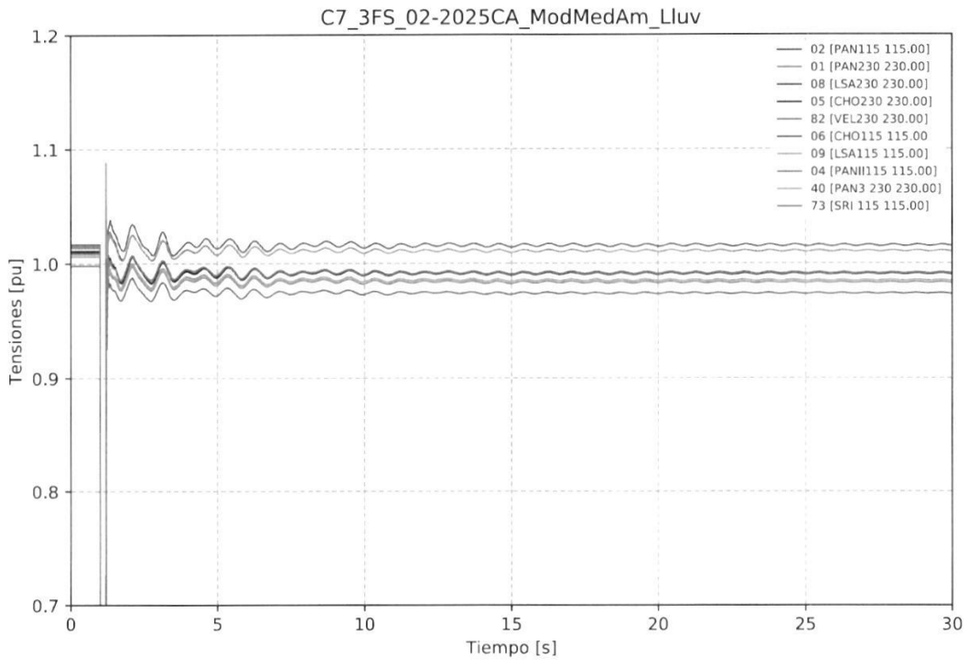
5706


C7_3FS_02-2025CA_ModMax_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

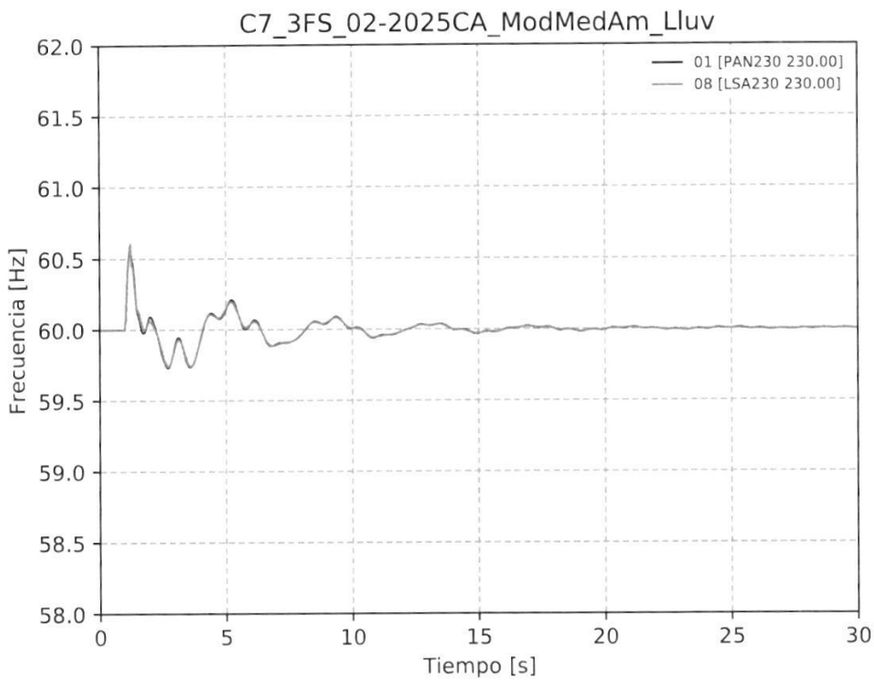

C7_3FS_02-2025CA_ModMax_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

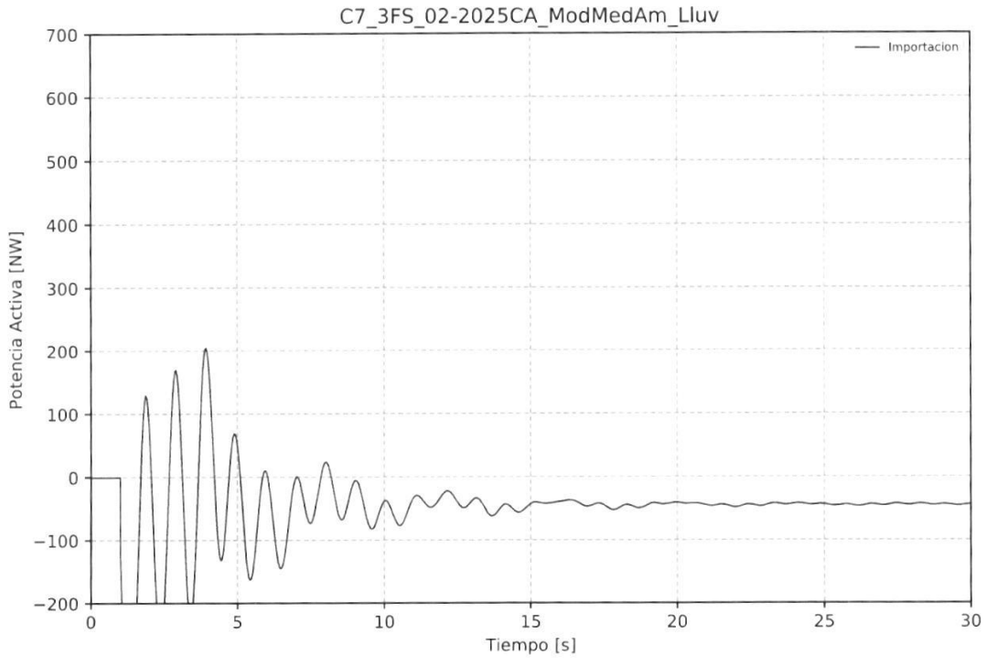
5707


C7_3FS_02-2025CA_ModMax_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

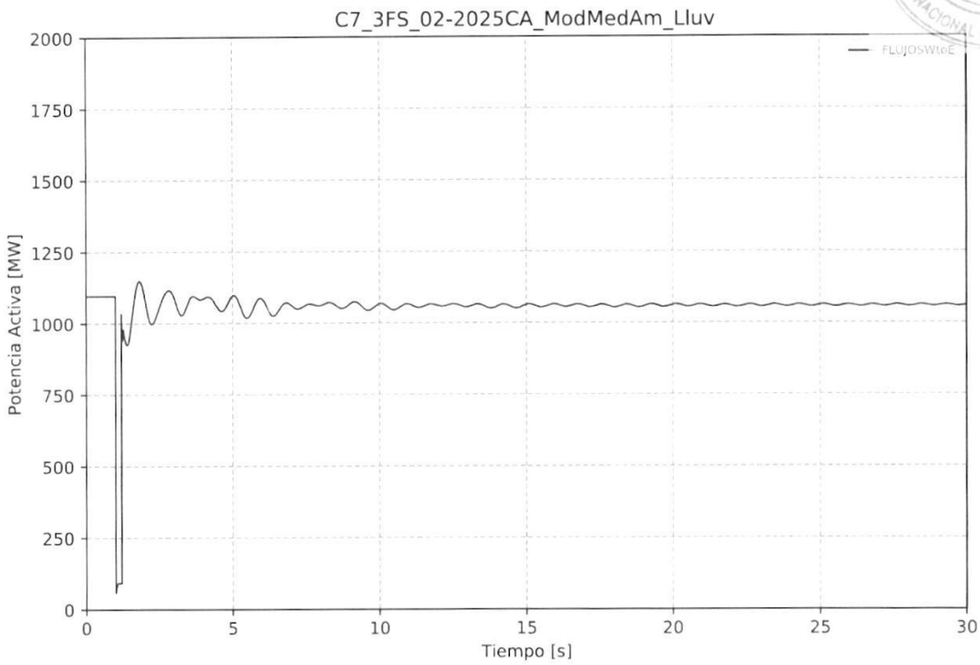

C7_3FS_02-2025CA_ModMedAm_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

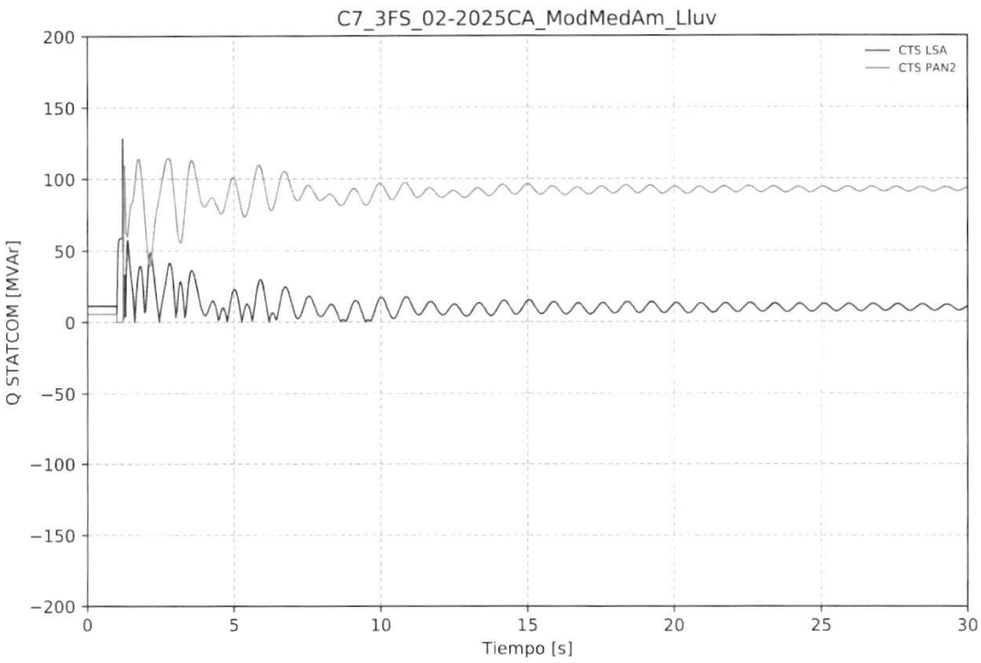
5708


C7_3FS_02-2025CA_ModMedAm_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
62.0
61.5
61.0
60.5
60.0
59.5
59.0
58.5
58.0
0
5
10
15
20
25
30
Tiempo [s]

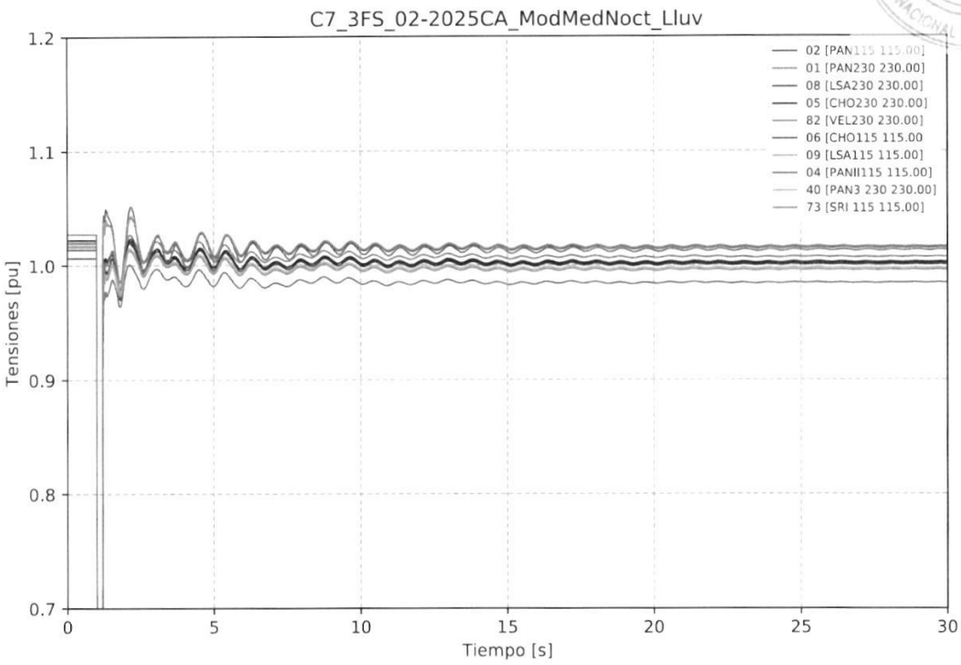

C7_3FS_02-2025CA_ModMedAm_Lluv
Importacion
Potencia Activa [NW]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30
Tiempo [s]

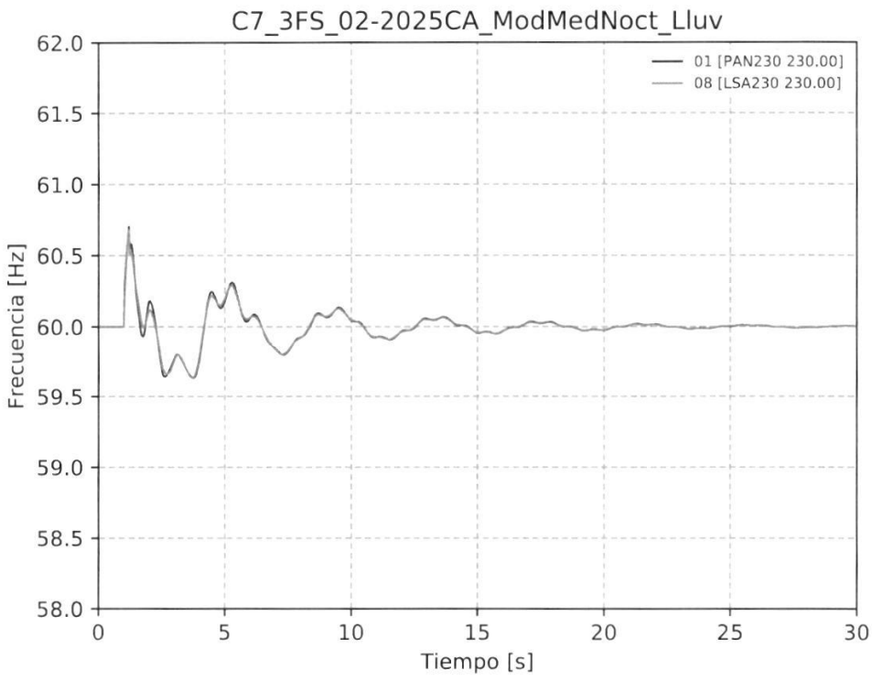
5709


C7_3FS_02-2025CA_ModMedAm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

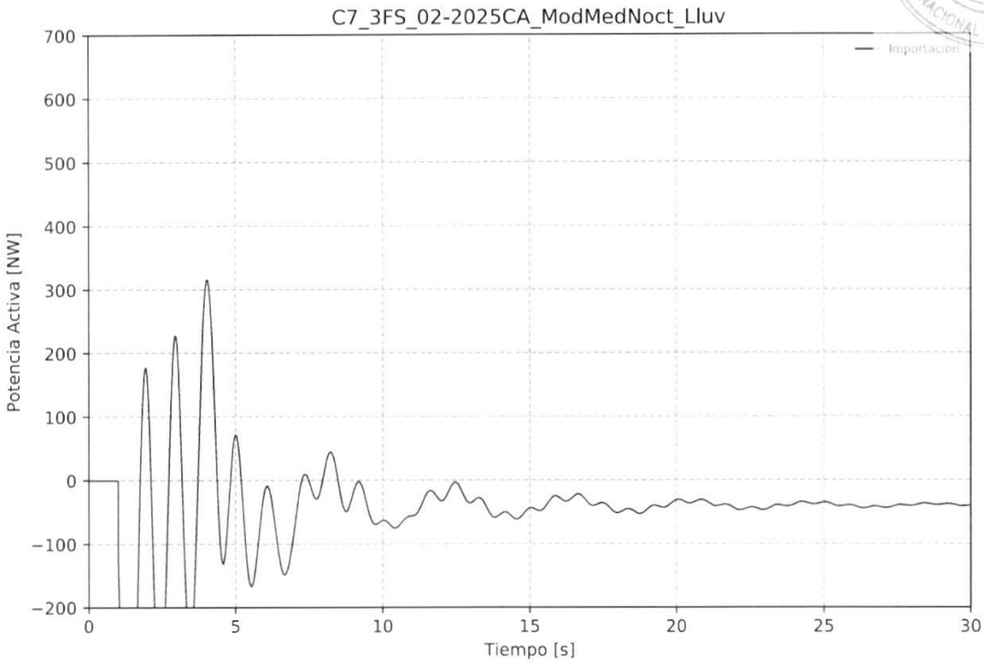

C7_3FS_02-2025CA_ModMedAm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

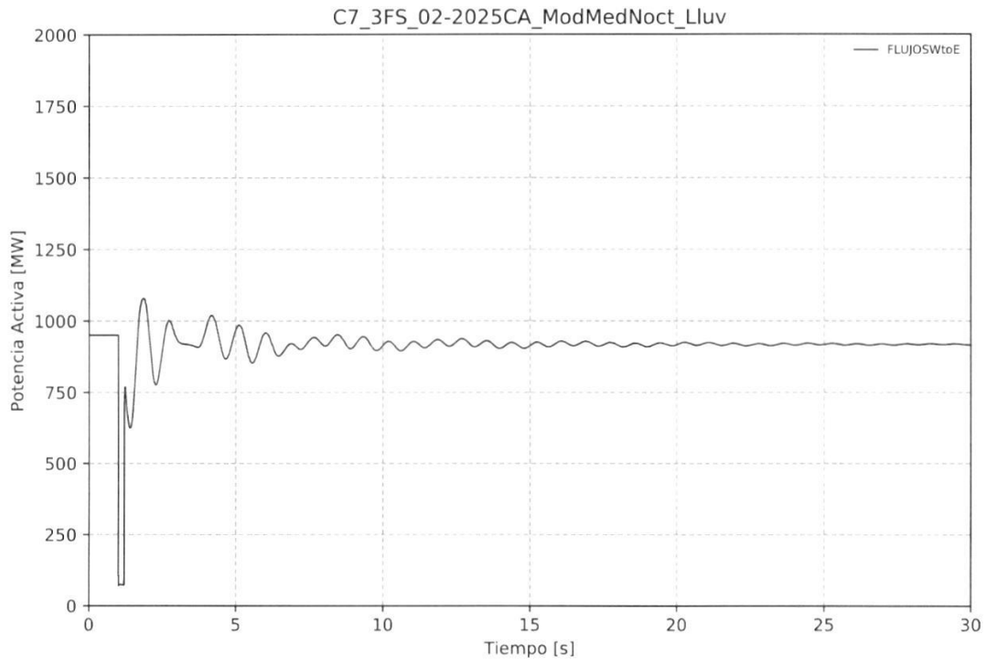
5710


C7_3FS_02-2025CA_ModMedNoct_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

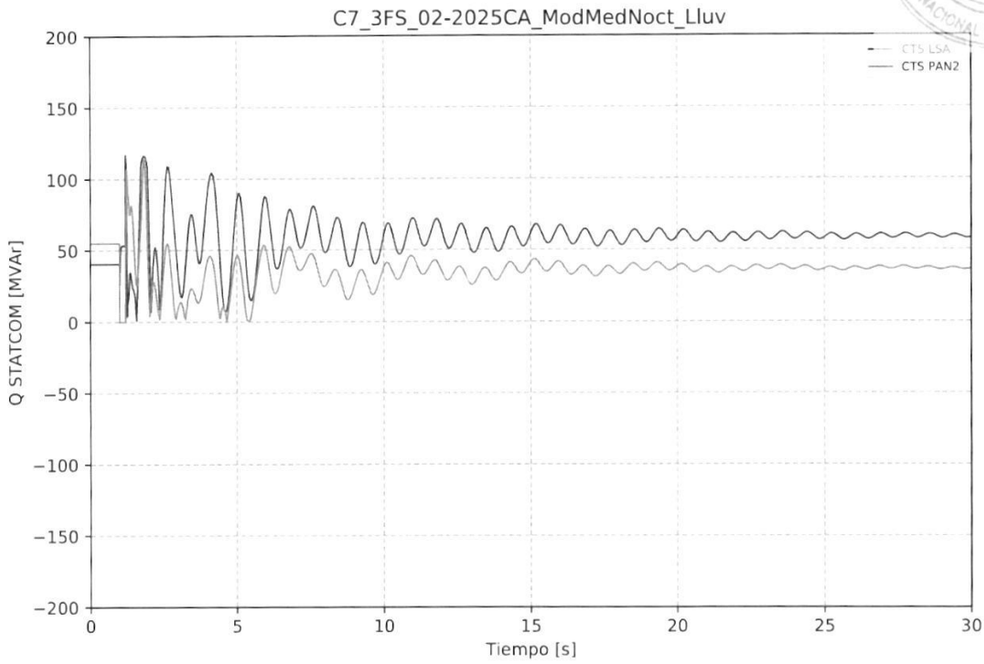

C7_3FS_02-2025CA_ModMedNoct_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

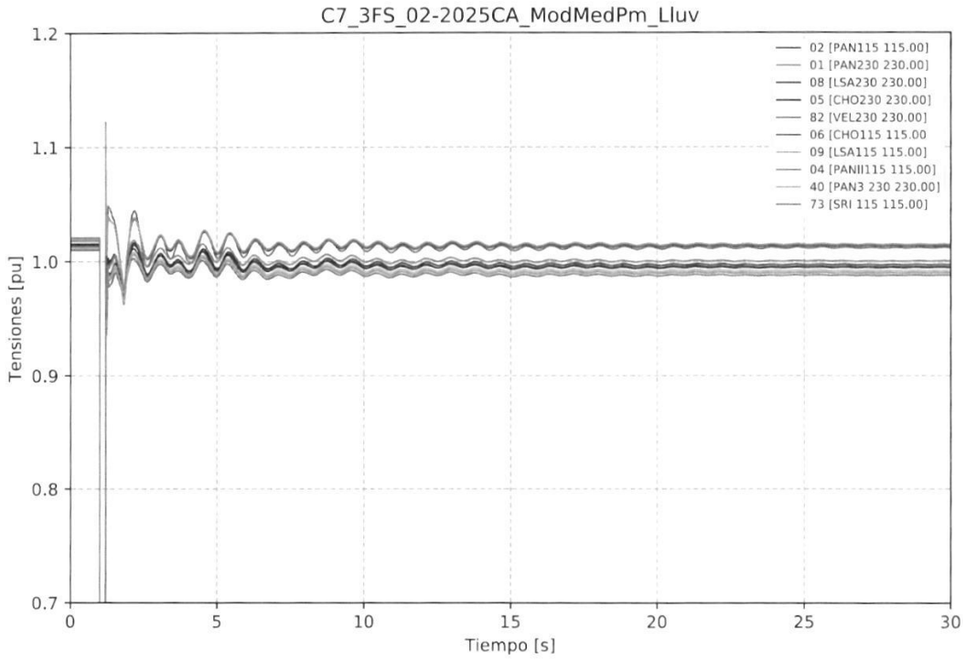
5711


C7_3FS_02-2025CA_ModMedNoct_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

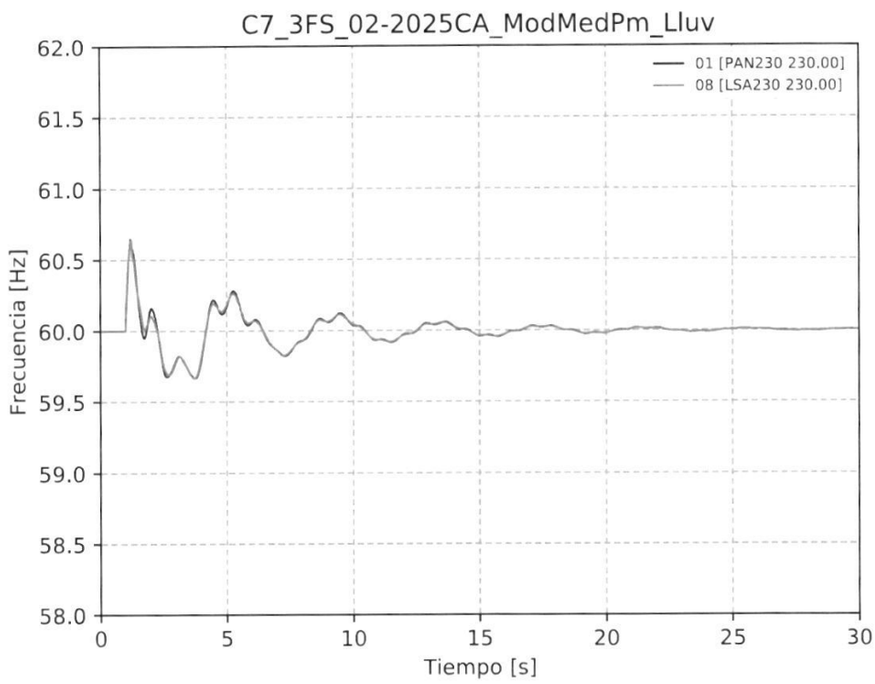

C7_3FS_02-2025CA_ModMedNoct_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

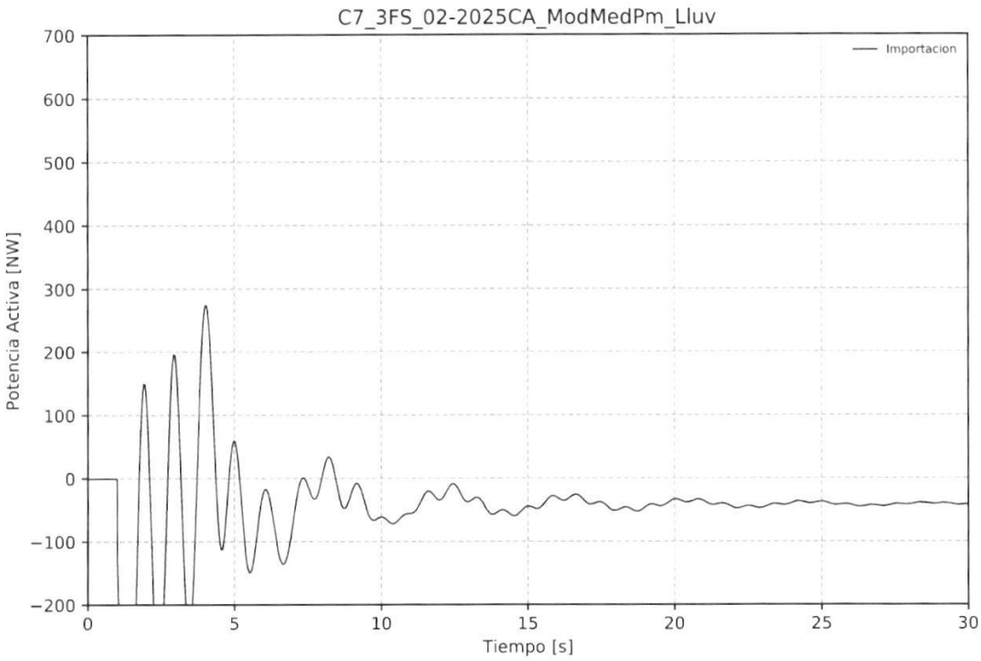
5712


C7_3FS_02-2025CA_ModMedNoct_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]


C7_3FS_02-2025CA_ModMedPm_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

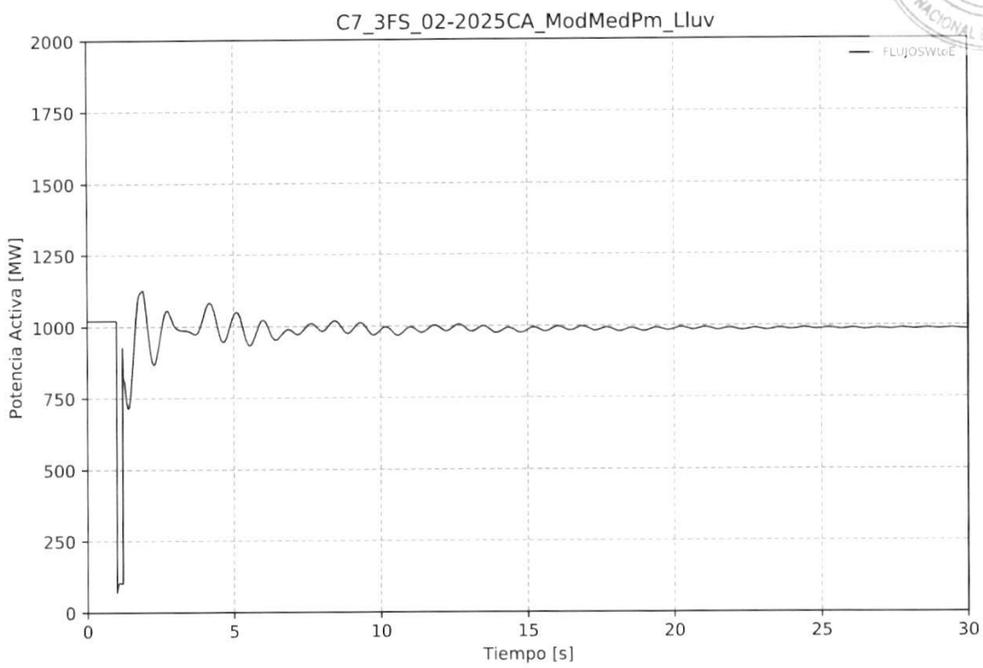
5713

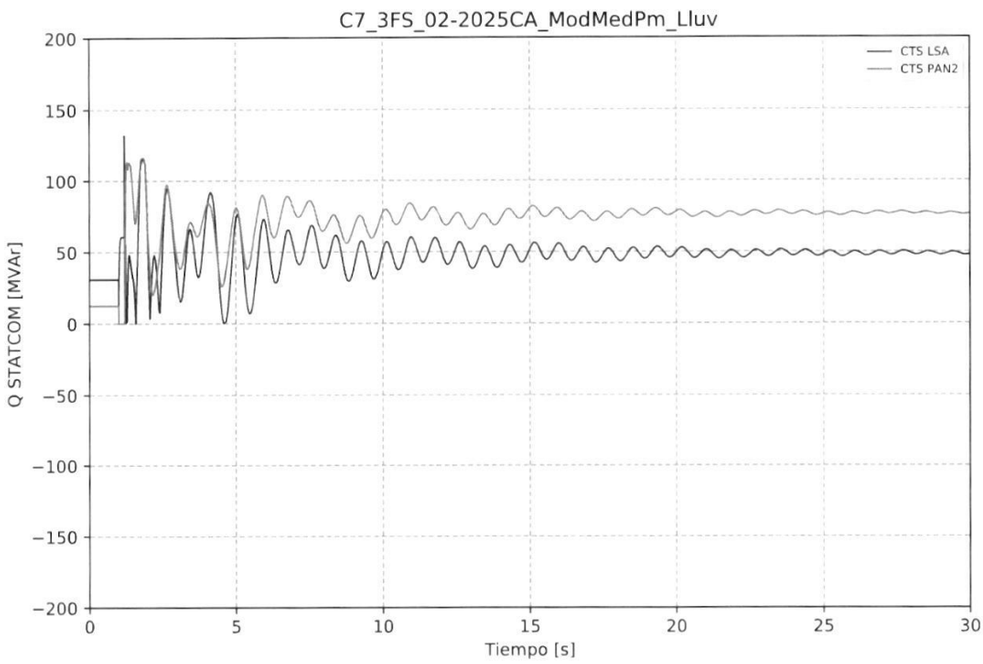

C7_3FS_02-2025CA_ModMedPm_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]


C7_3FS_02-2025CA_ModMedPm_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

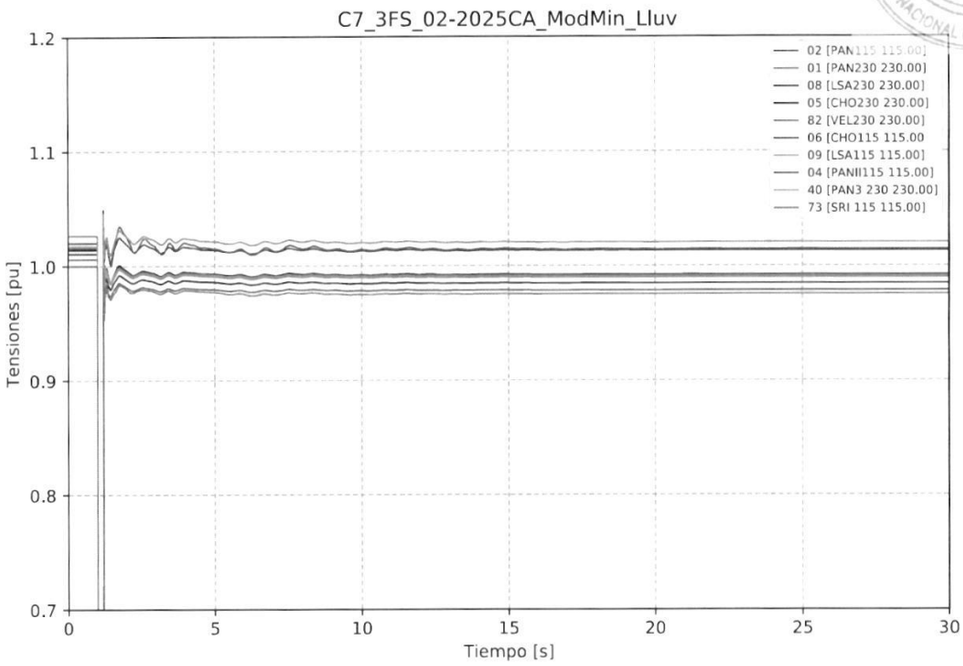
REPUBLICA DE PANAMA
AUTORIDAD NACIONAL DE LOS SERVICIOS PUBLICOS

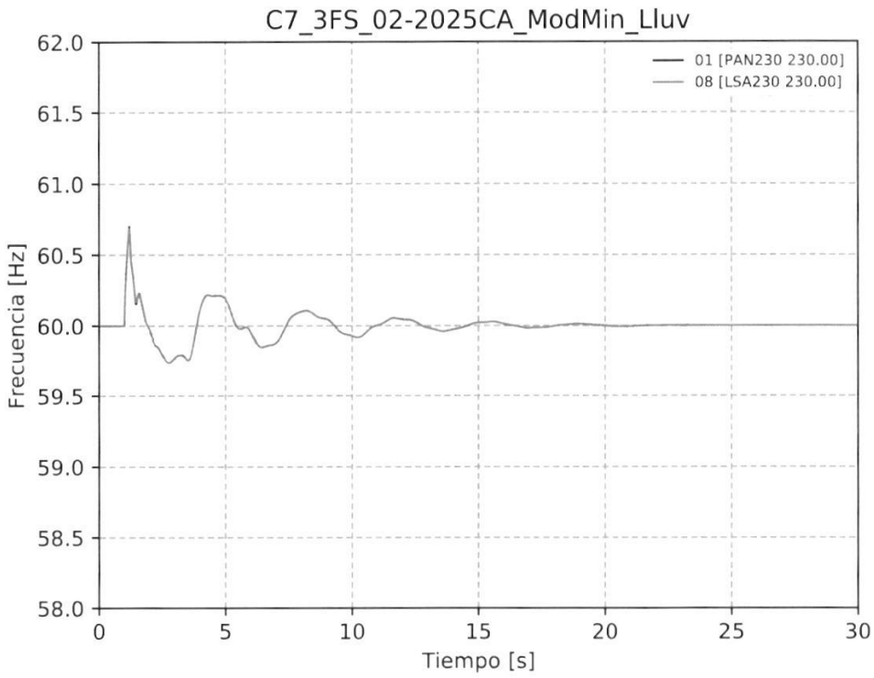
5714



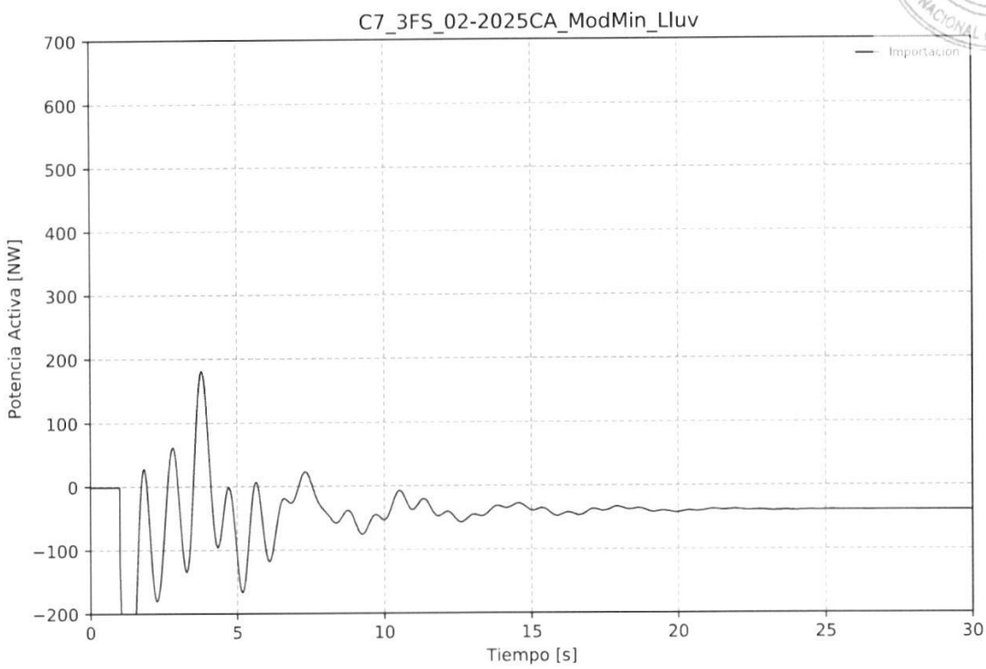


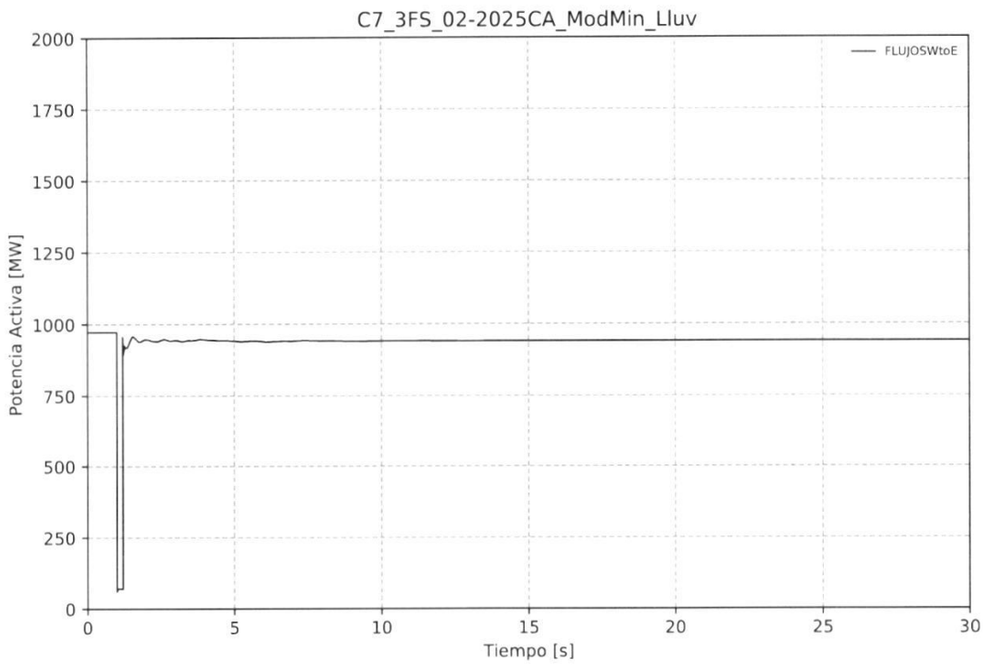
5715


C7_3FS_02-2025CA_ModMin_Lluv
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

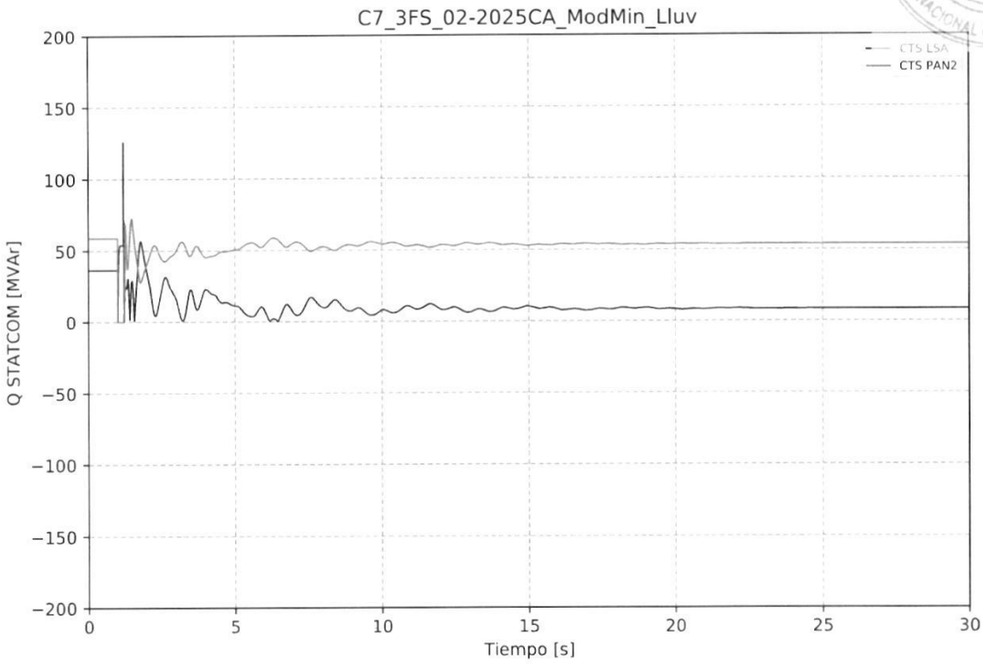

C7_3FS_02-2025CA_ModMin_Lluv
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

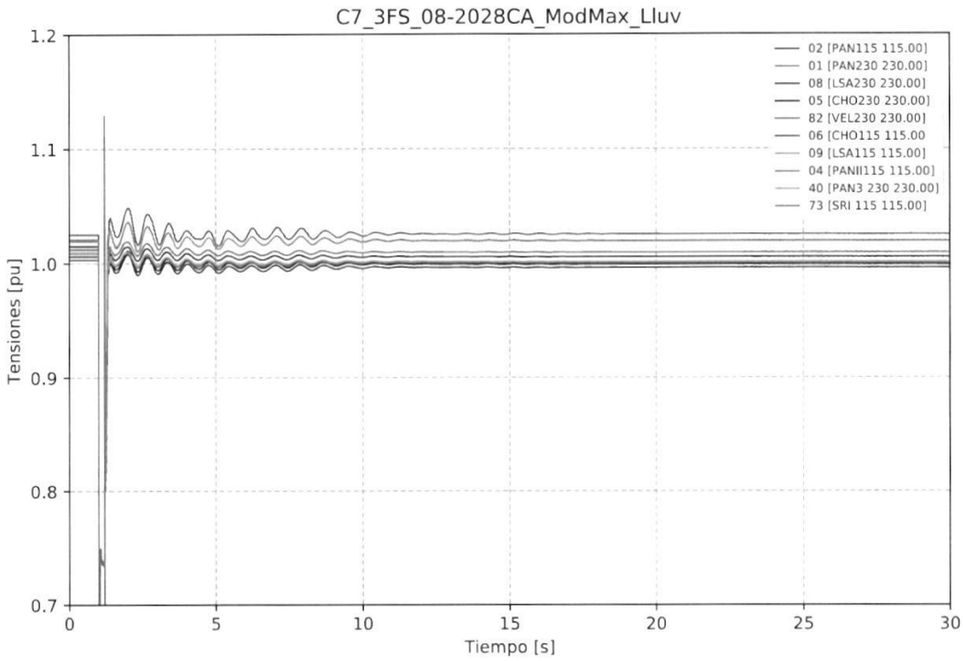
5716


C7_3FS_02-2025CA_ModMin_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

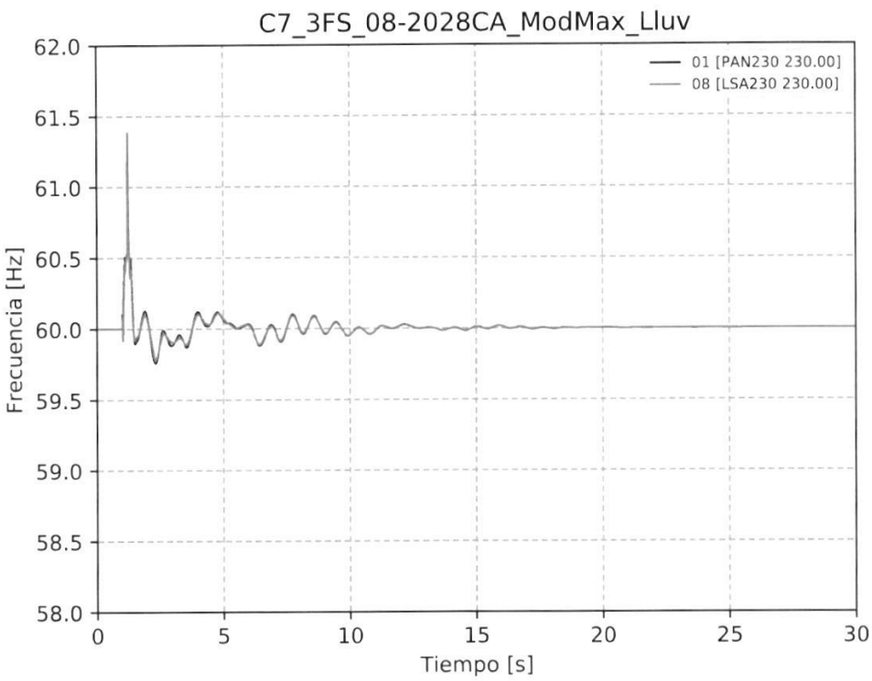

C7_3FS_02-2025CA_ModMin_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

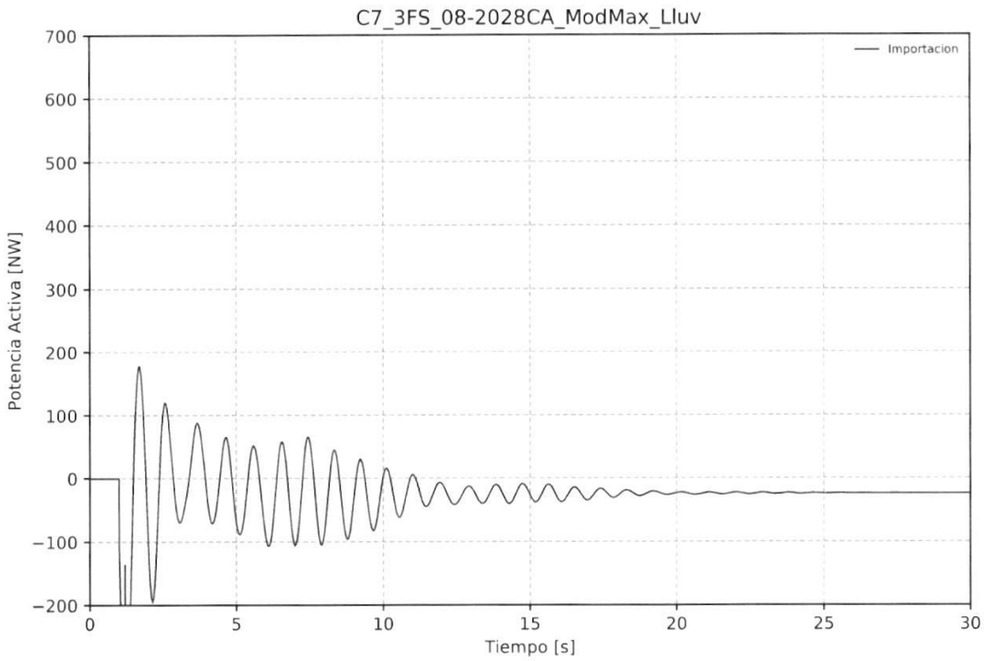
5717


C7_3FS_02-2025CA_ModMin_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

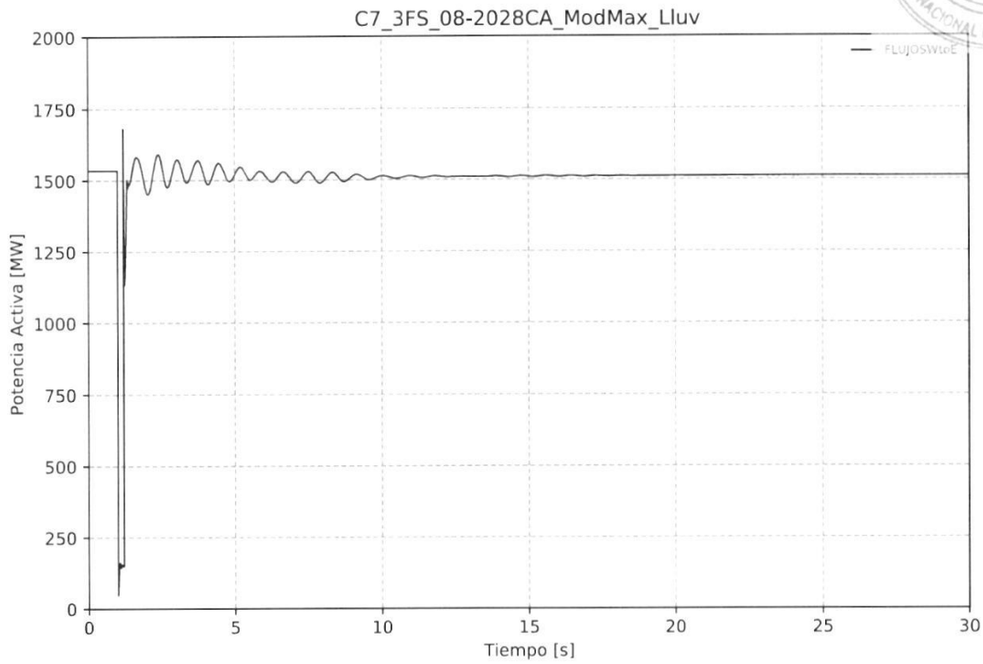

C7_3FS_08-2028CA_ModMax_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

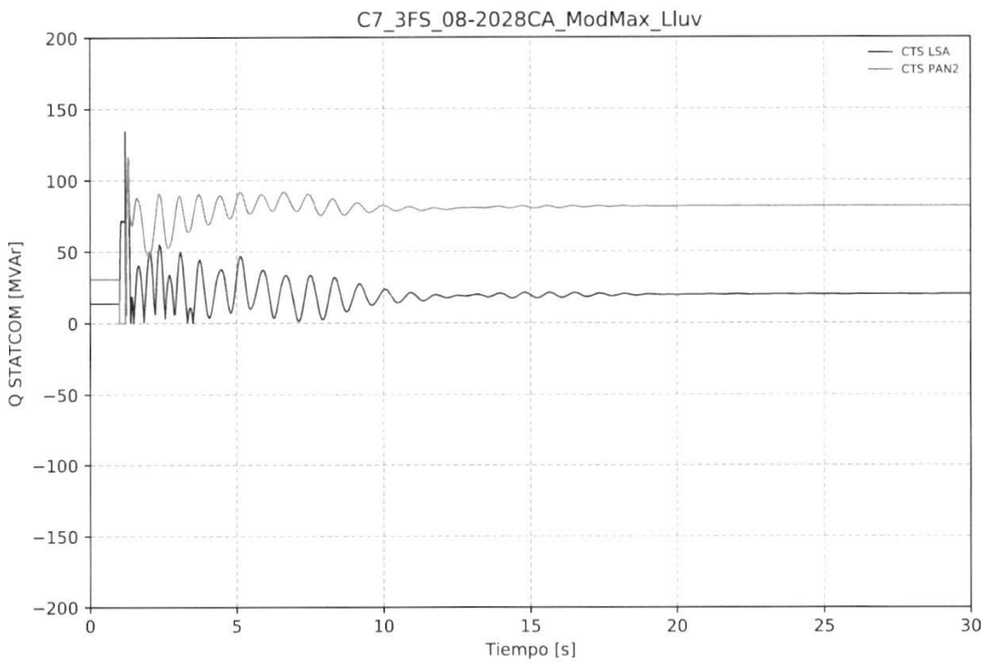
5718


C7_3FS_08-2028CA_ModMax_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

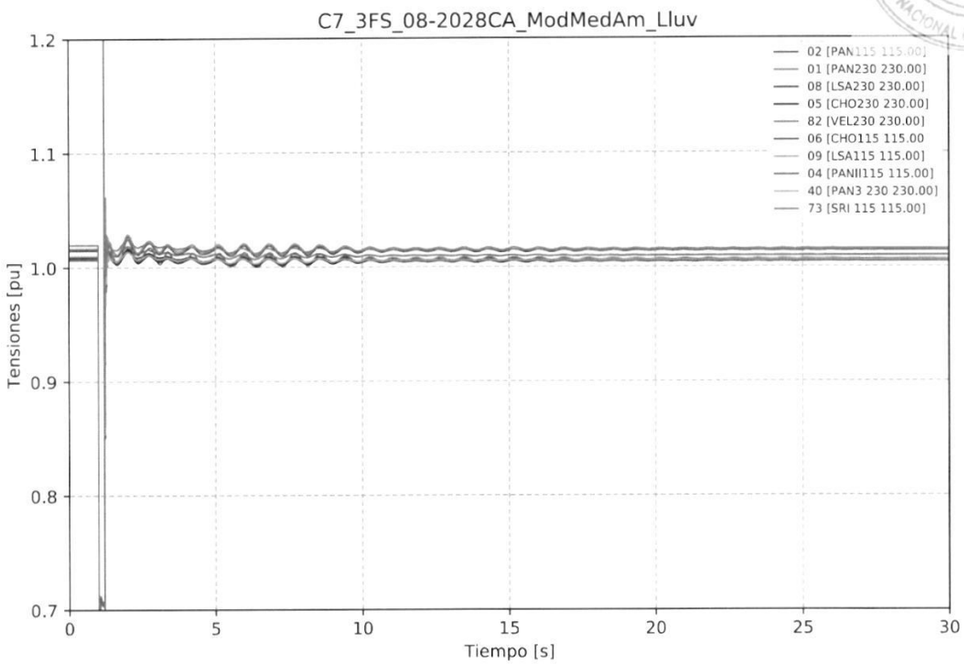

C7_3FS_08-2028CA_ModMax_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

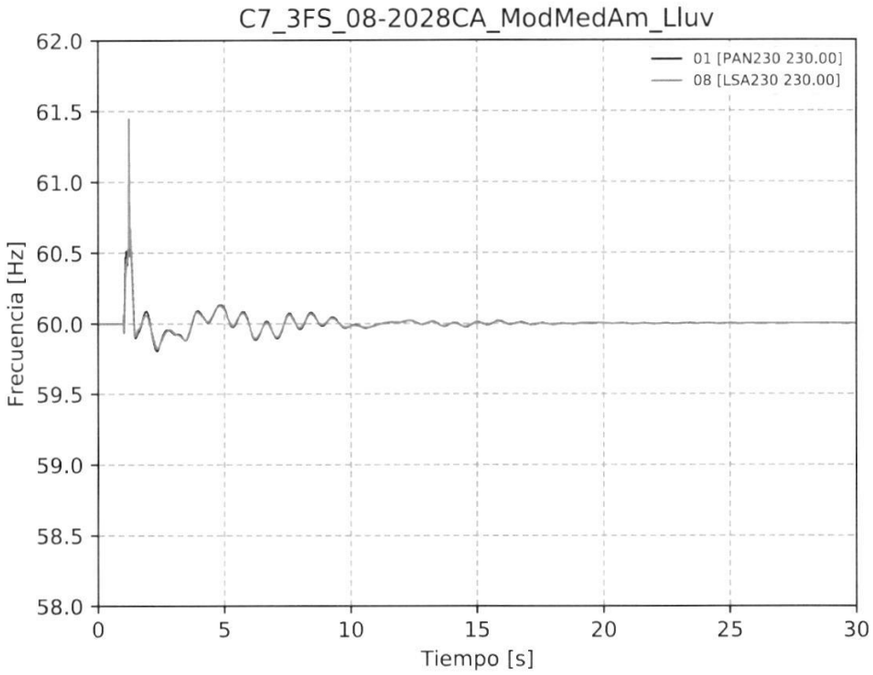
5719


C7_3FS_08-2028CA_ModMax_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30

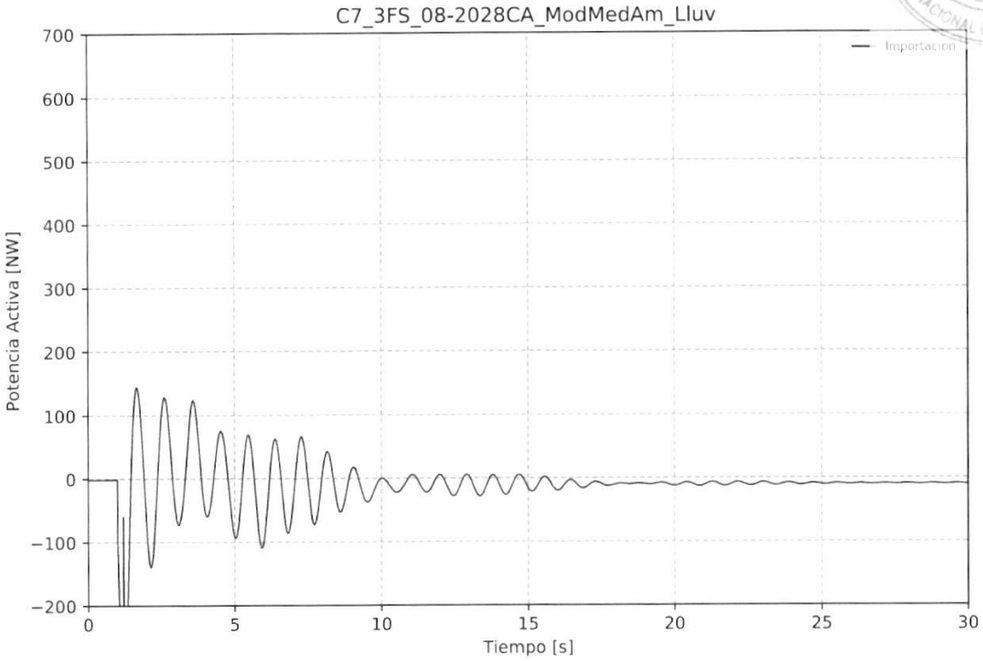

C7_3FS_08-2028CA_ModMax_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]
200
150
100
50
0
−50
−100
−150
−200
0
5
10
15
20
25
30

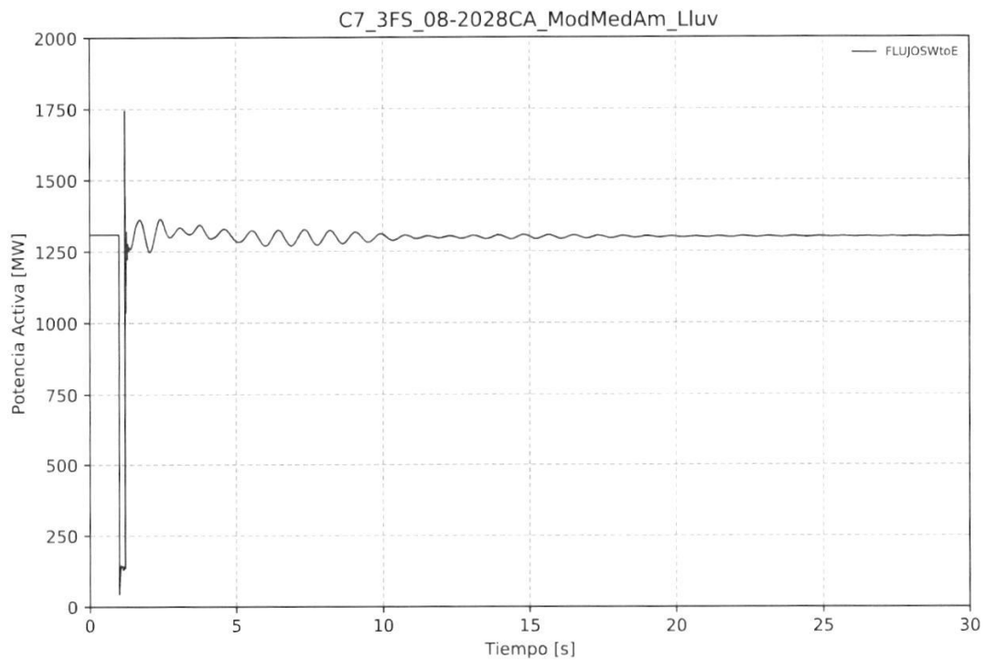
5720


C7_3FS_08-2028CA_ModMedAm_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

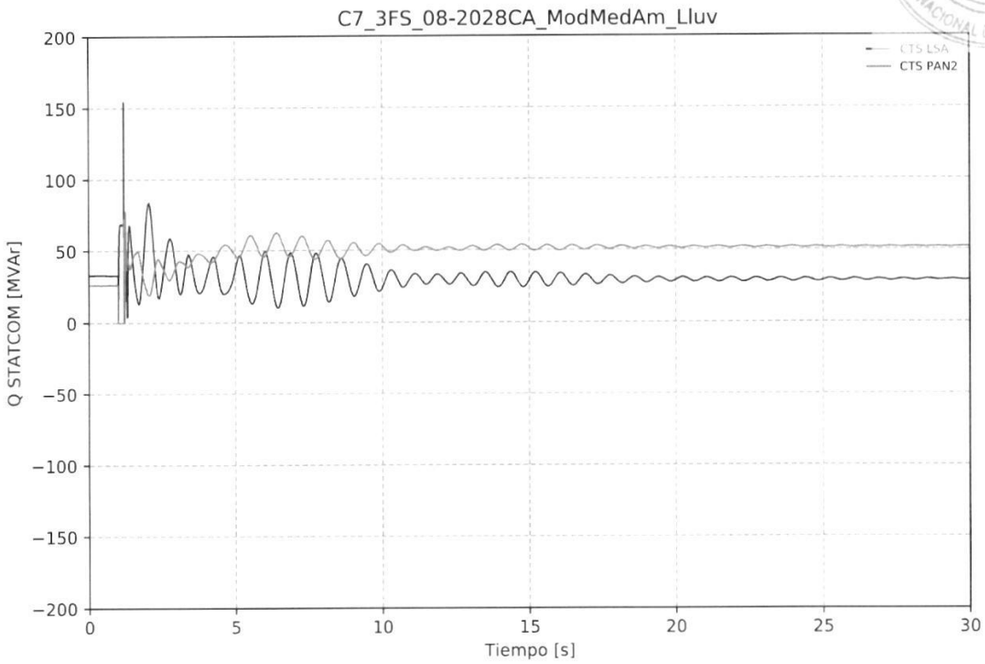

C7_3FS_08-2028CA_ModMedAm_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

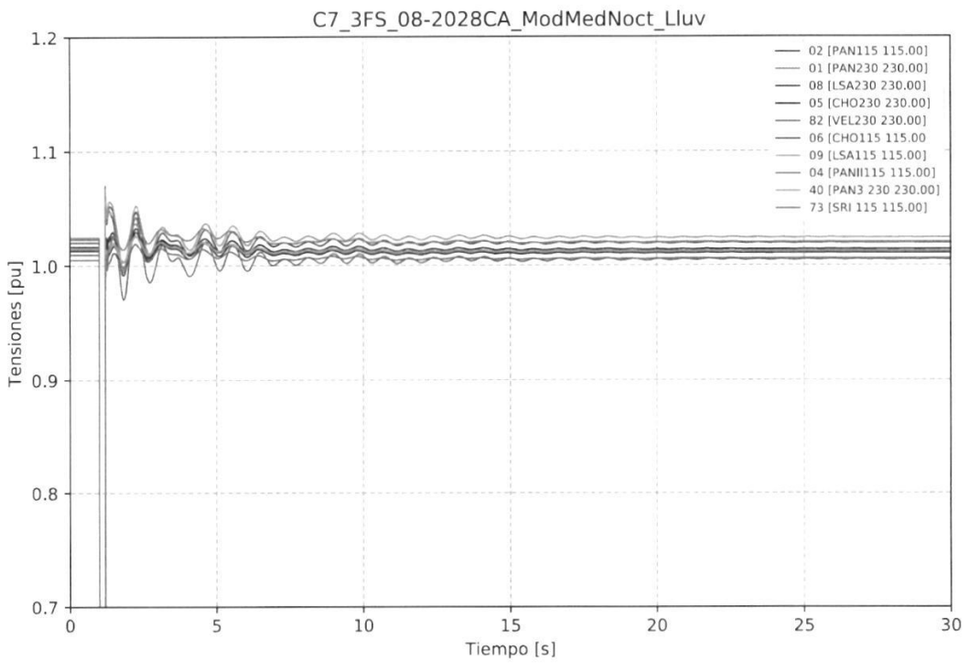
5721


C7_3FS_08-2028CA_ModMedAm_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

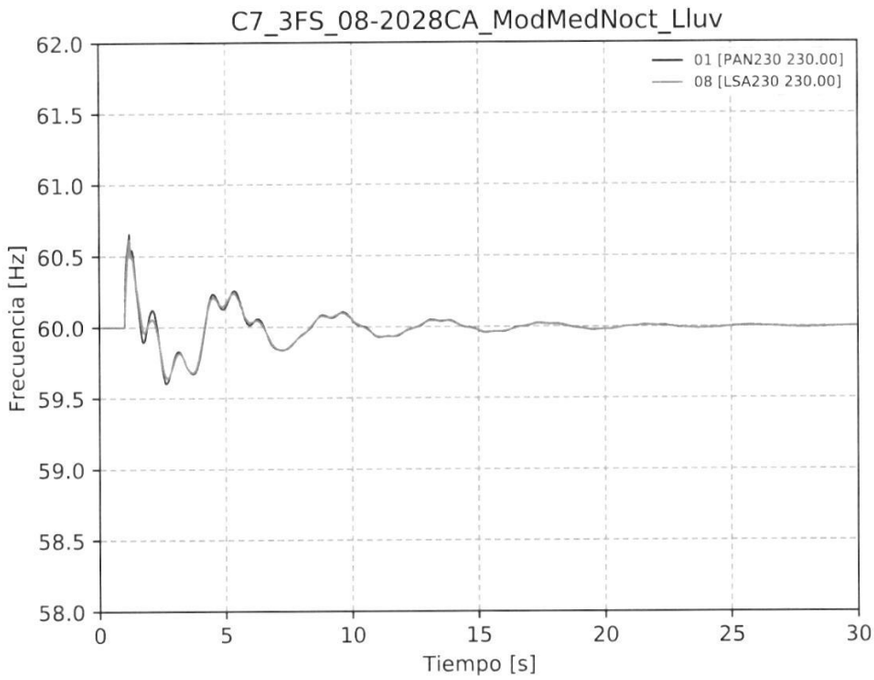

C7_3FS_08-2028CA_ModMedAm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

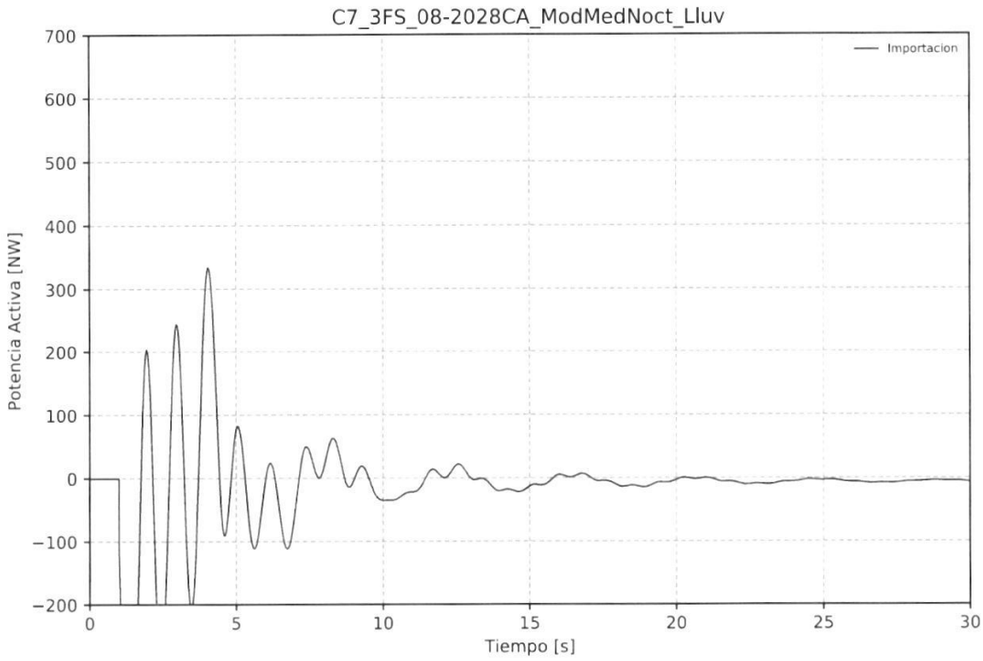
5722


C7_3FS_08-2028CA_ModMedAm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

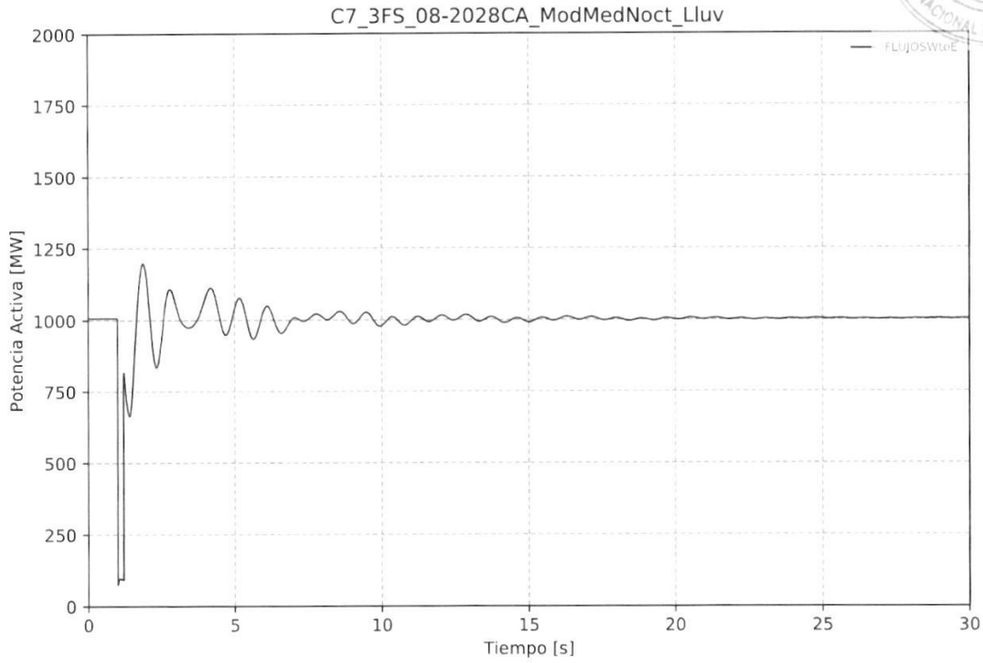

C7_3FS_08-2028CA_ModMedNoct_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

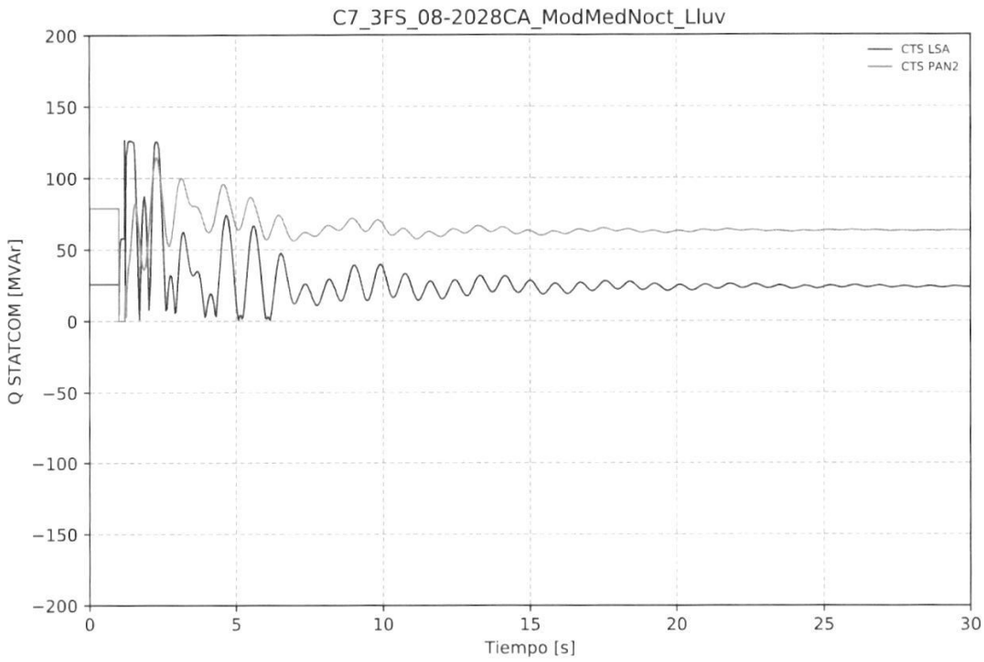
5723


C7_3FS_08-2028CA_ModMedNoct_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
62.0
61.5
61.0
60.5
60.0
59.5
59.0
58.5
58.0
0
5
10
15
20
25
30
Tiempo [s]

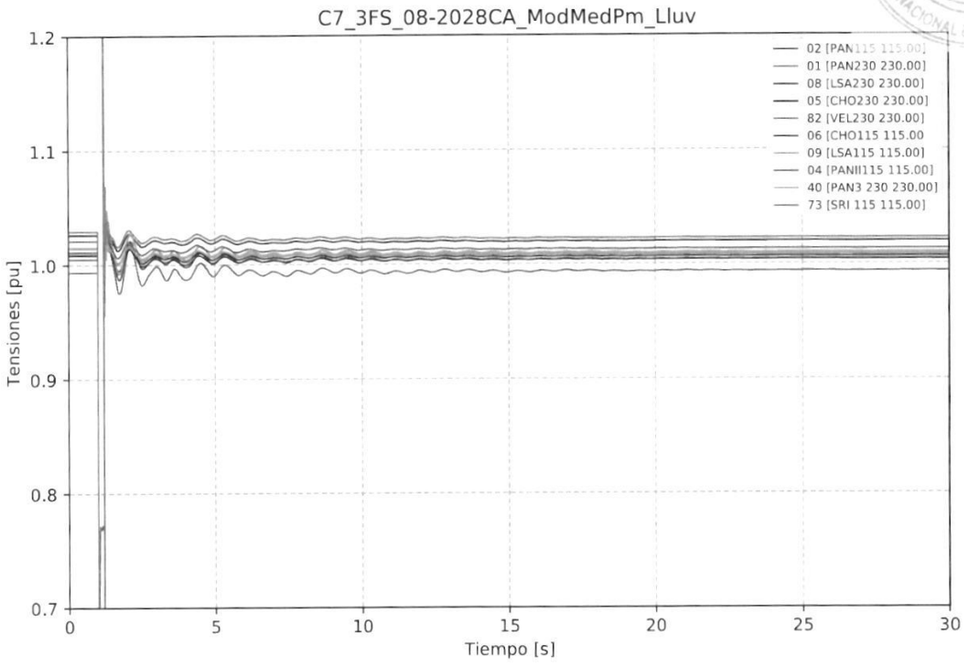

C7_3FS_08-2028CA_ModMedNoct_Lluv
Importacion
Potencia Activa [NW]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30
Tiempo [s]

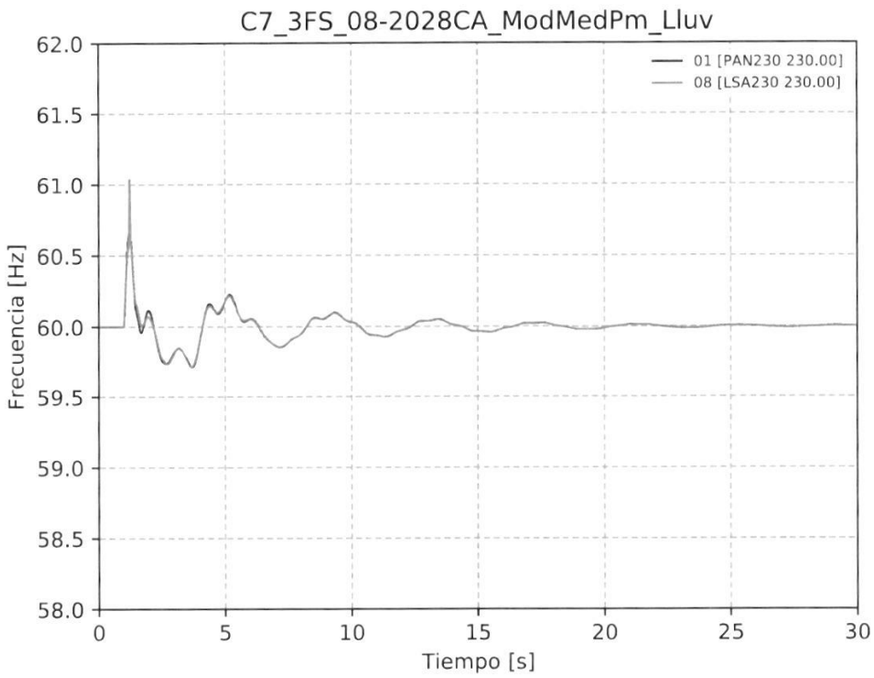
5724


C7_3FS_08-2028CA_ModMedNoct_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

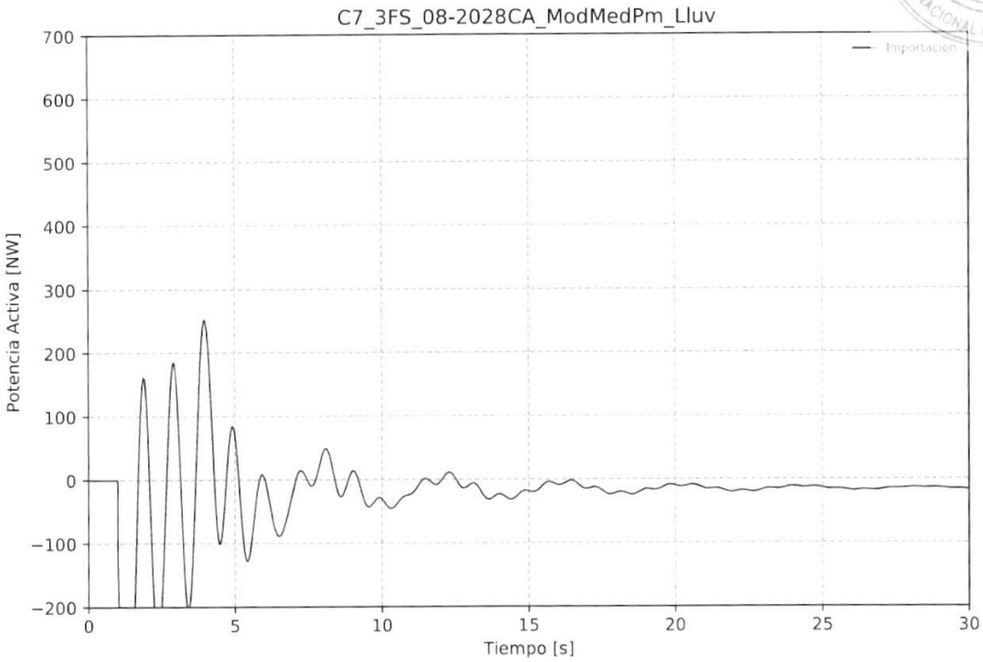

C7_3FS_08-2028CA_ModMedNoct_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

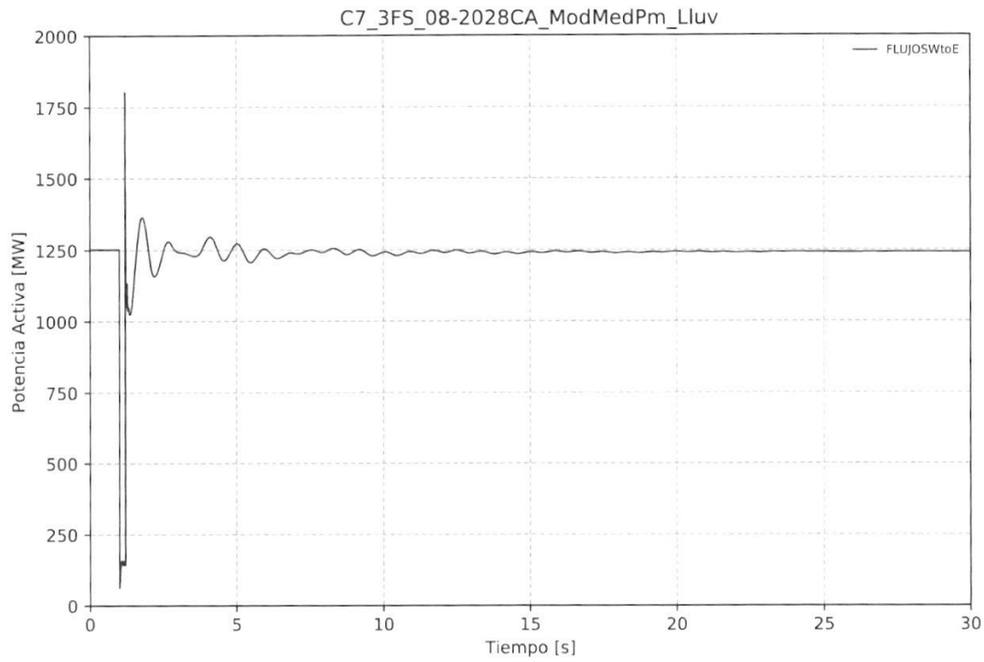
5725


C7_3FS_08-2028CA_ModMedPm_Lluv
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

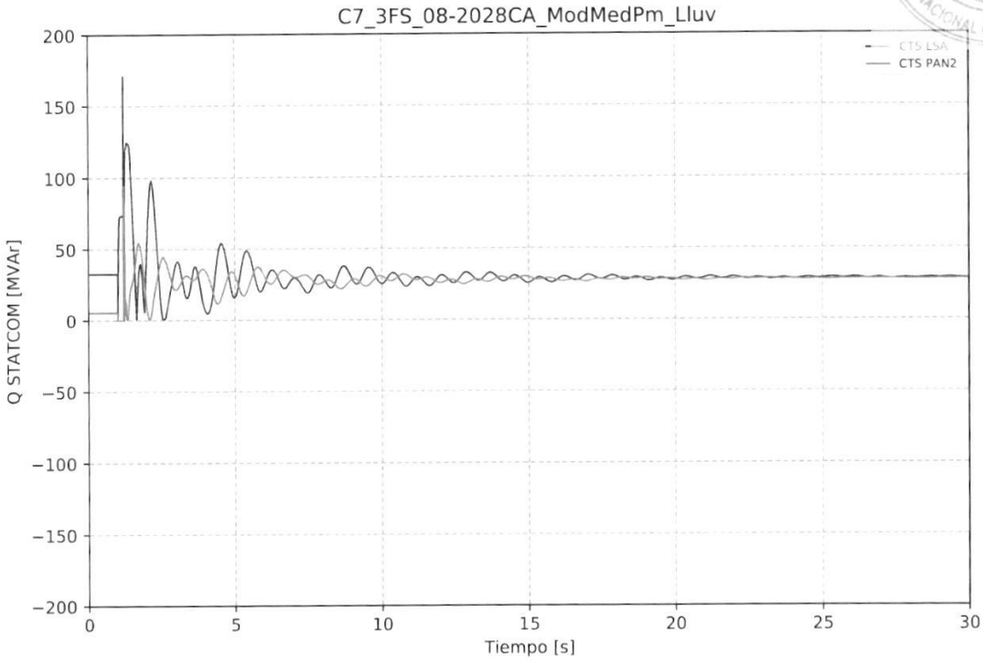

C7_3FS_08-2028CA_ModMedPm_Lluv
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

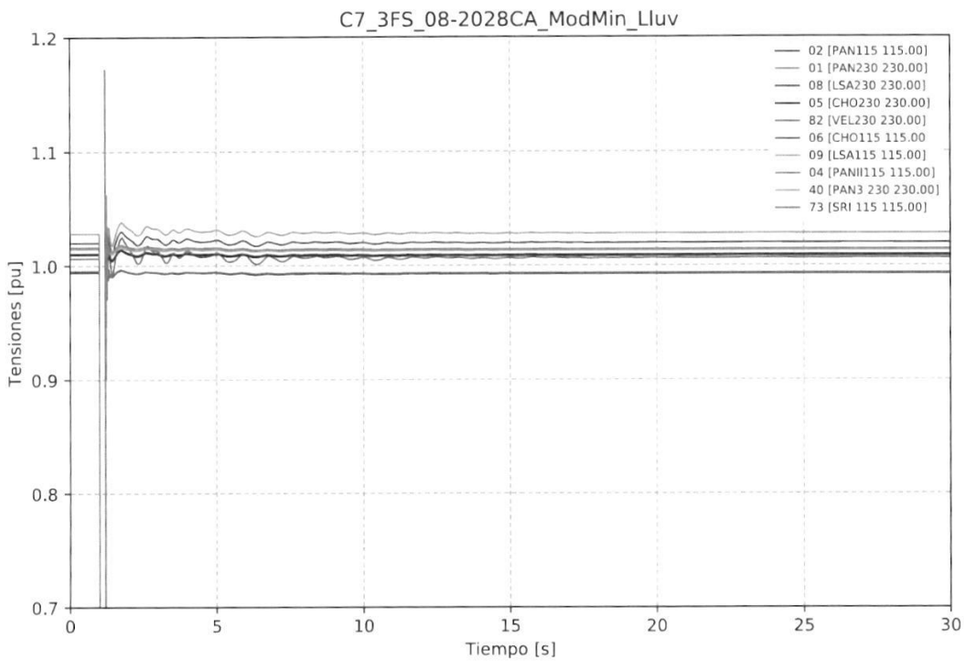
5726


C7_3FS_08-2028CA_ModMedPm_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

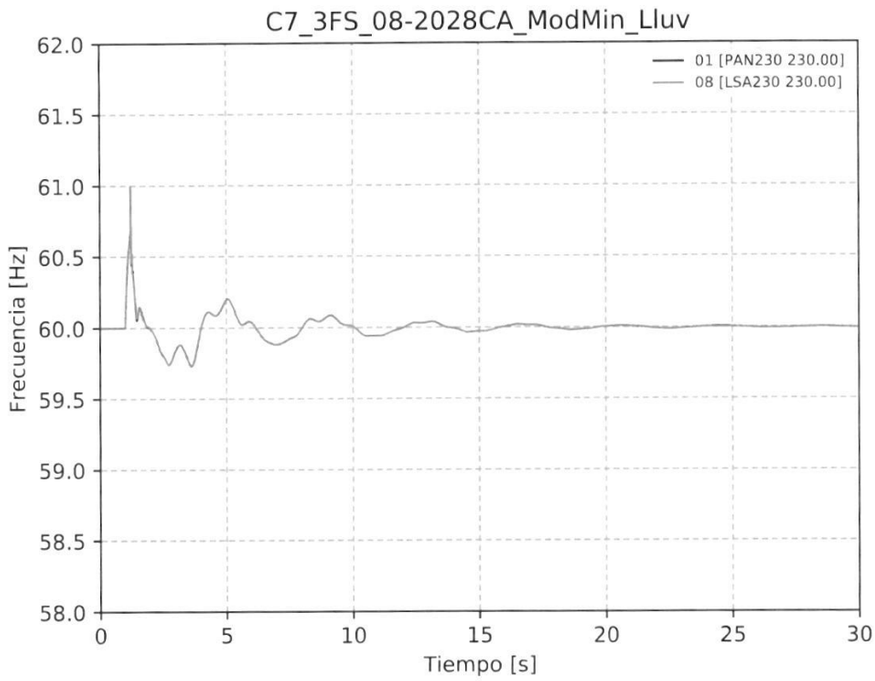

C7_3FS_08-2028CA_ModMedPm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

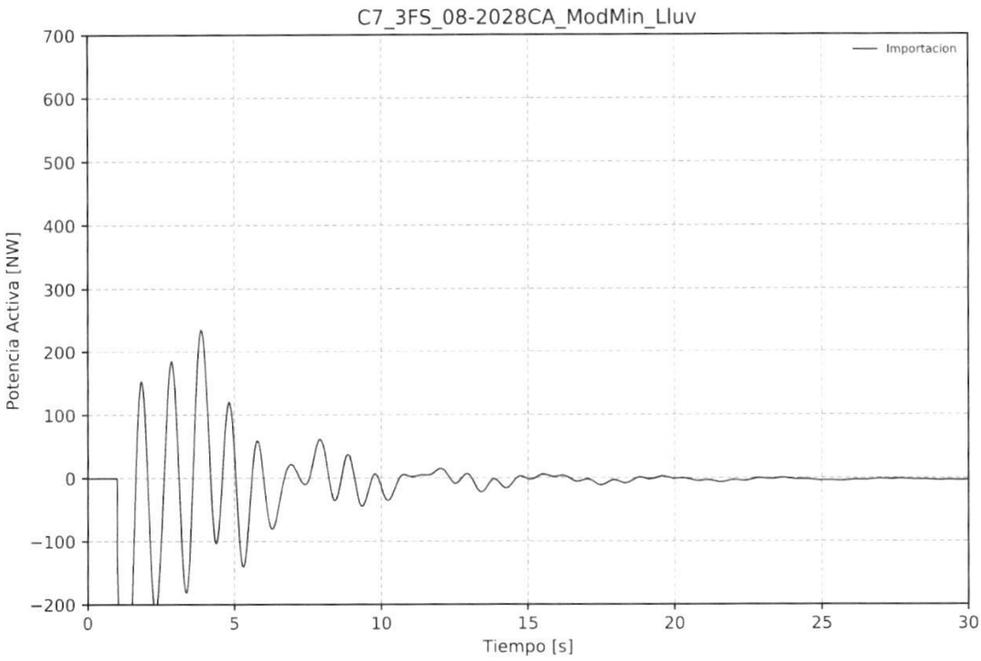
5727


C7_3FS_08-2028CA_ModMedPm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

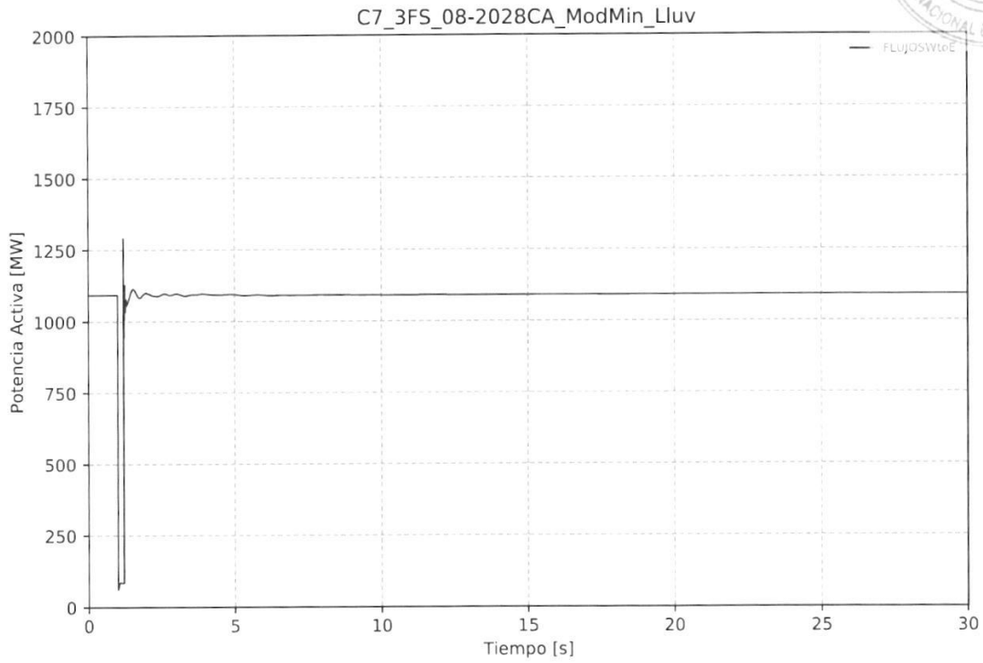

C7_3FS_08-2028CA_ModMin_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

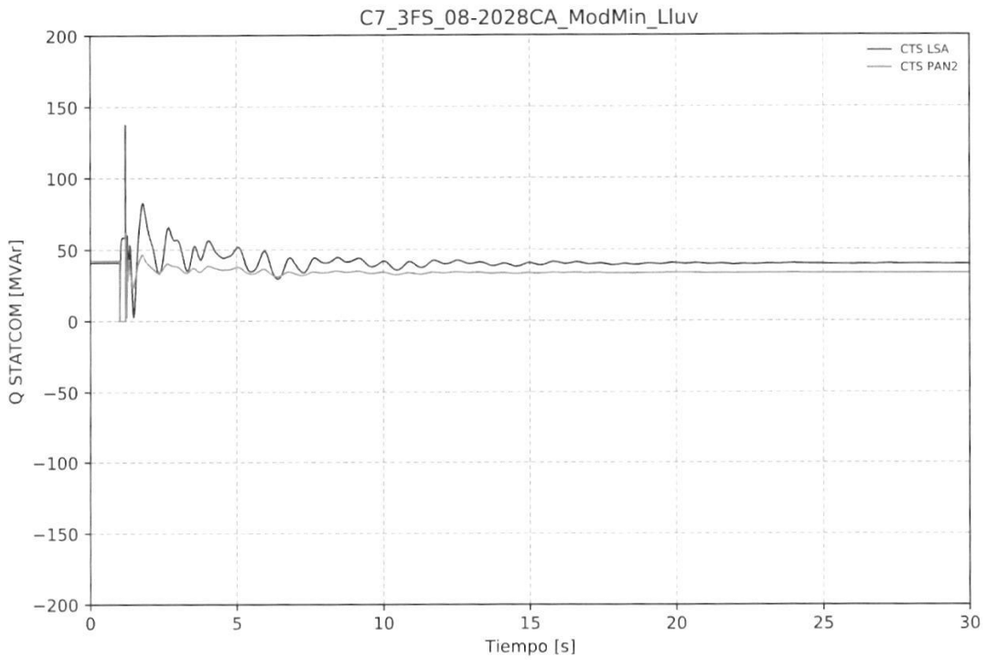
5728


C7_3FS_08-2028CA_ModMin_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]


C7_3FS_08-2028CA_ModMin_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

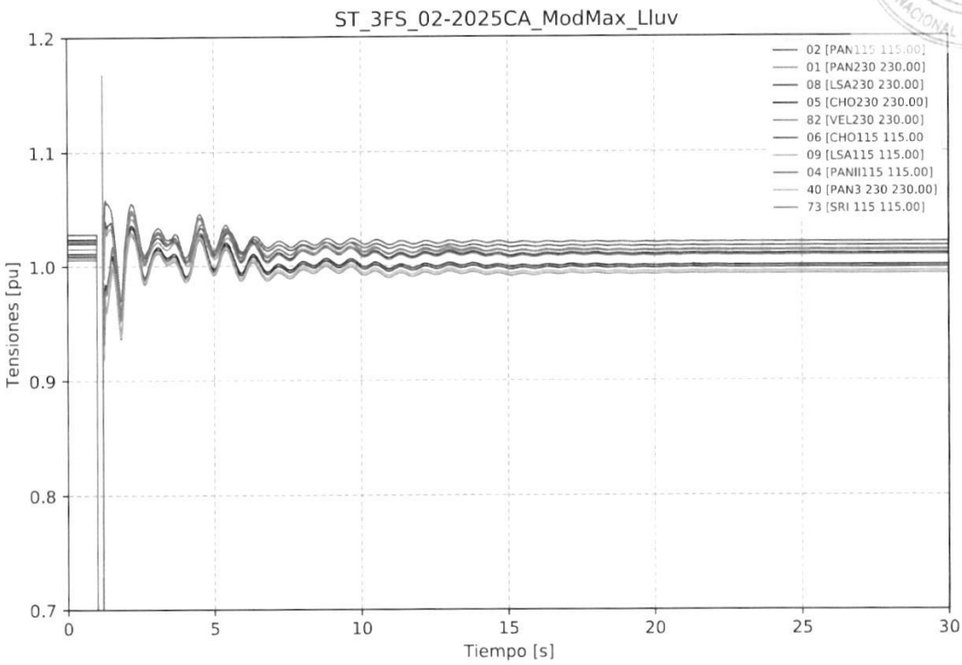
5729

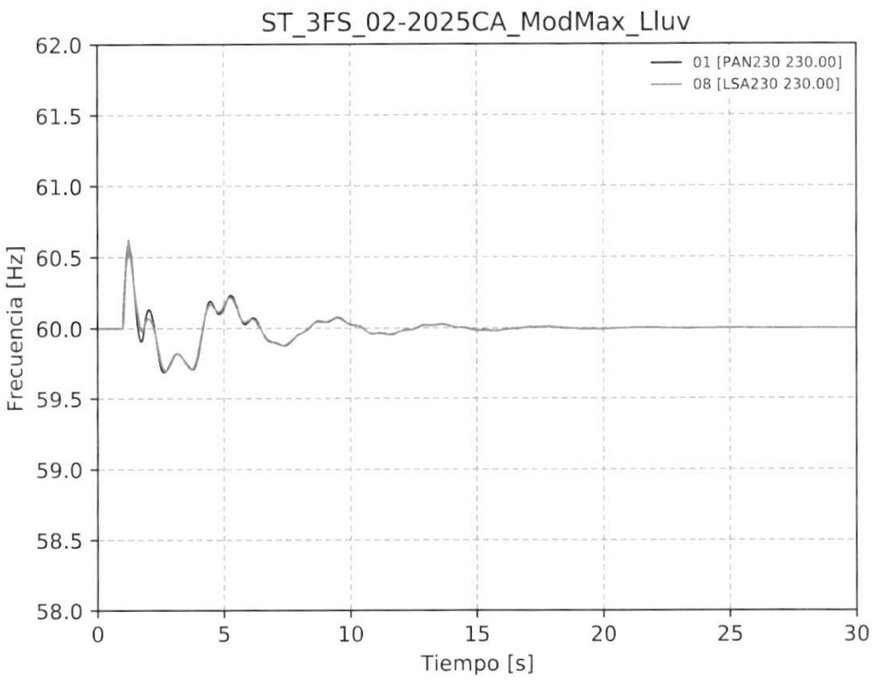

C7_3FS_08-2028CA_ModMin_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]


C7_3FS_08-2028CA_ModMin_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

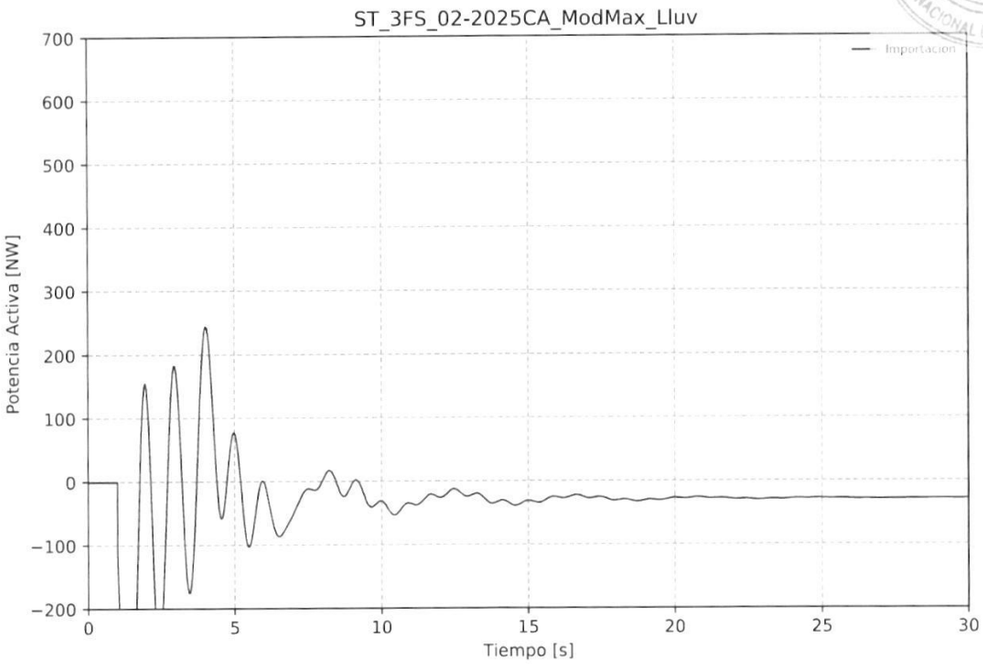
REPÚBLICA DE PANAMÁ
AUTORIDAD NACIONAL DE LOS SERVICIOS PÚBLICOS

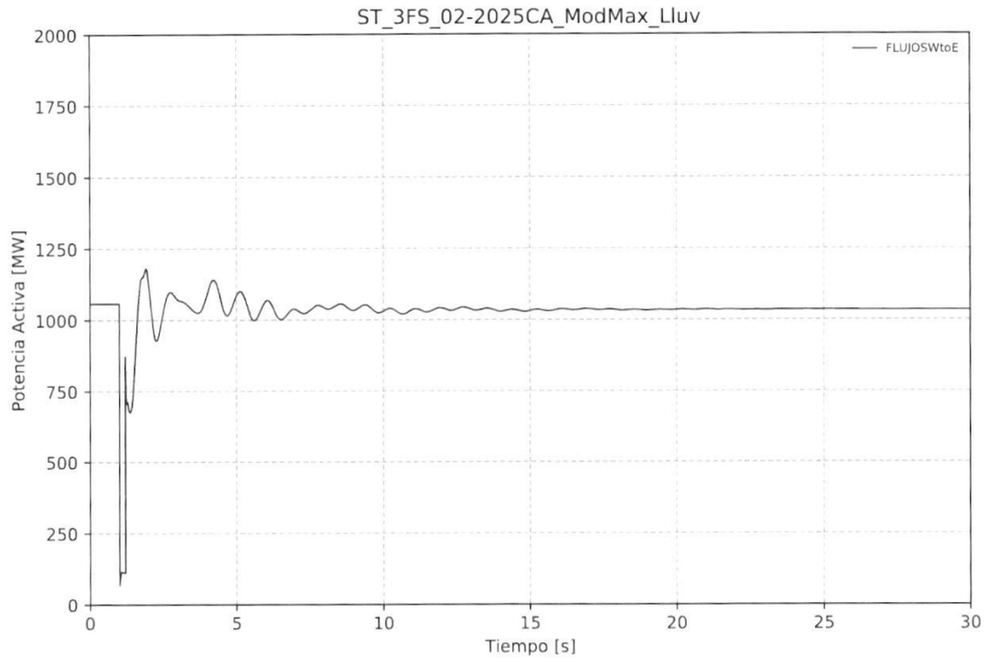
5730





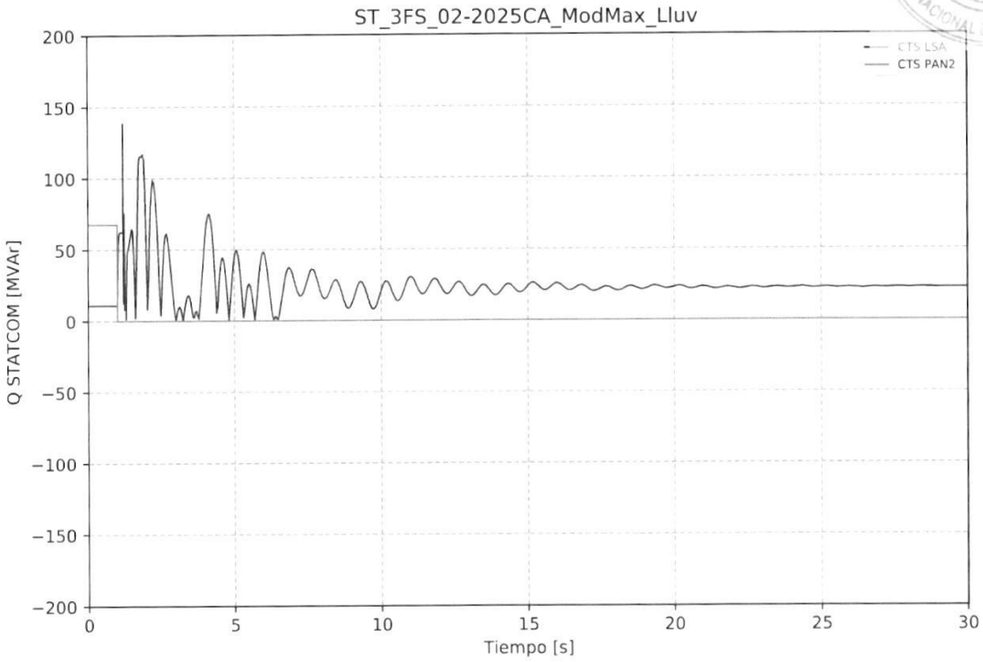
5731

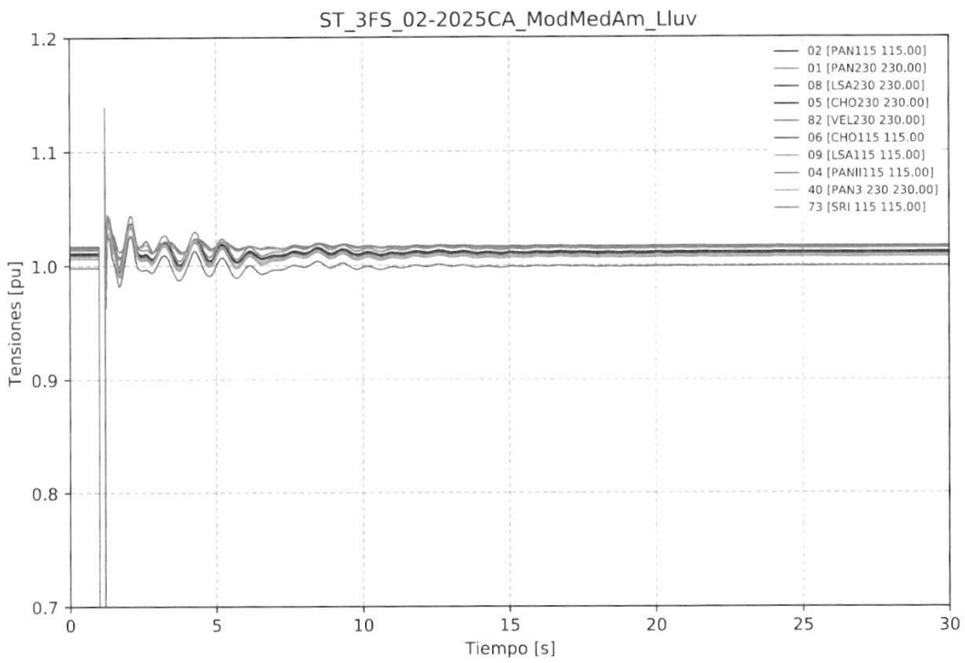

ST_3FS_02-2025CA_ModMax_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]


ST_3FS_02-2025CA_ModMax_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

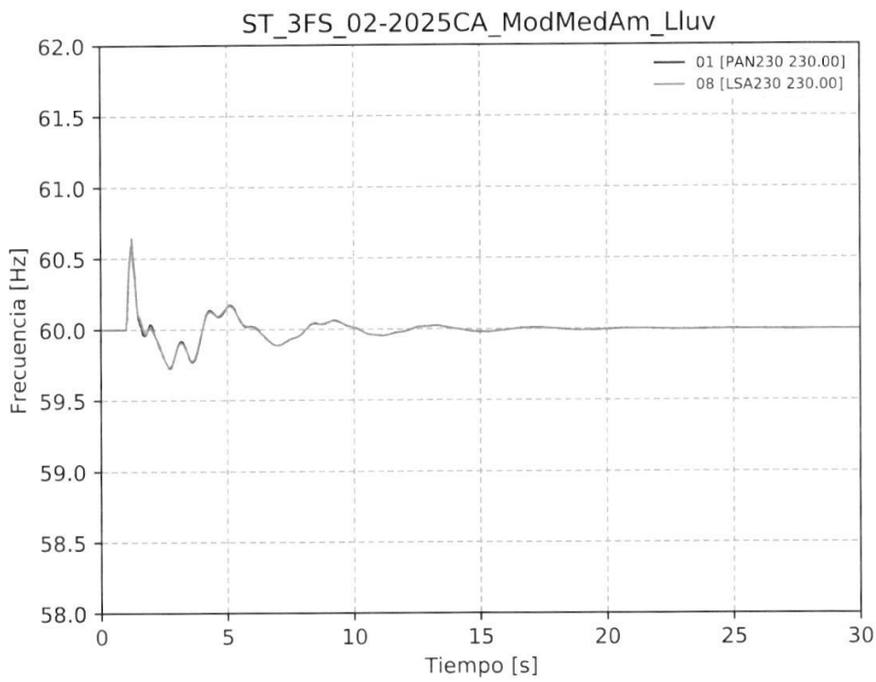
REPÚBLICA DE PANAMÁ
AUTORIDAD NACIONAL DE LOS SERVICIOS PÚBLICOS

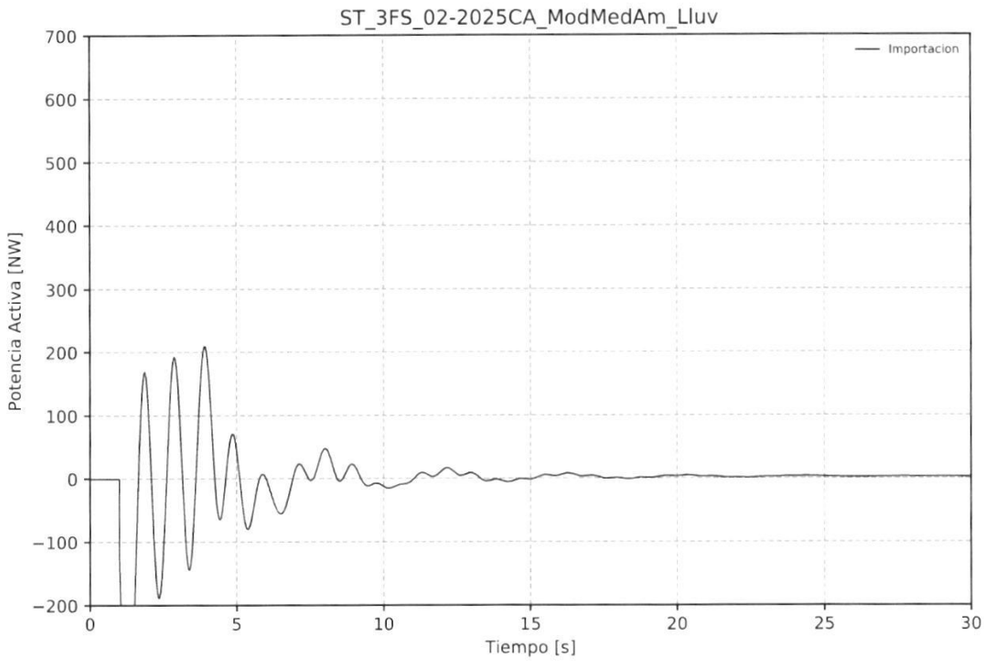
5732



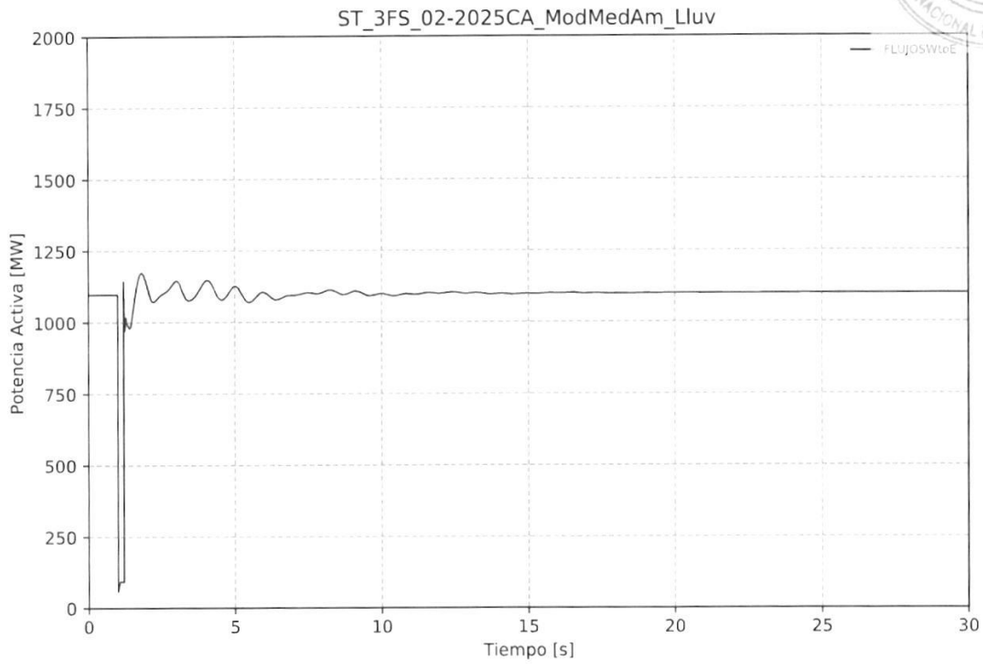


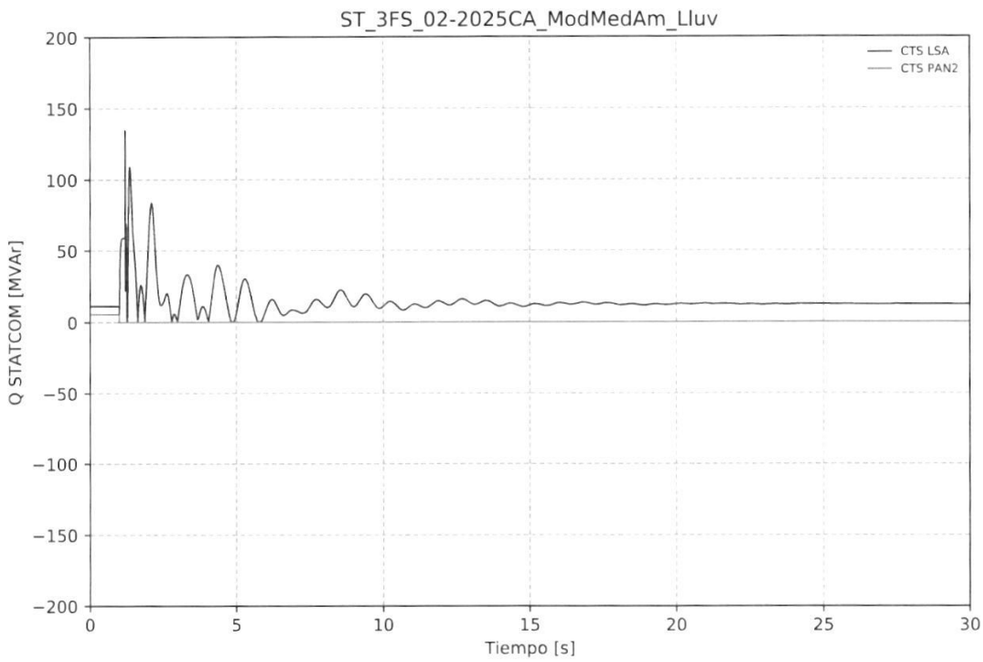
5733


ST_3FS_02-2025CA_ModMedAm_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

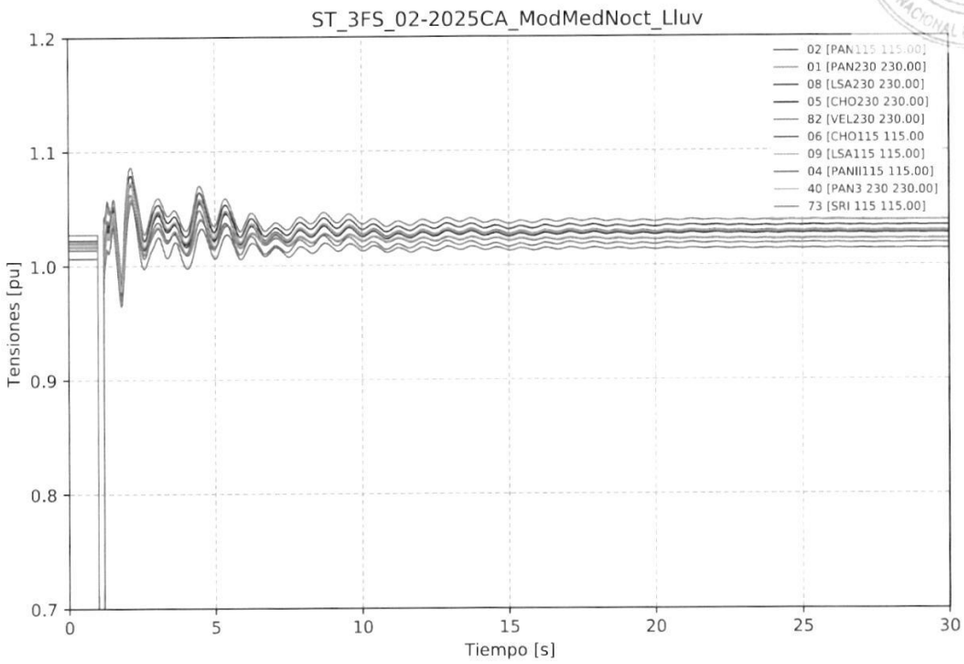

ST_3FS_02-2025CA_ModMedAm_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

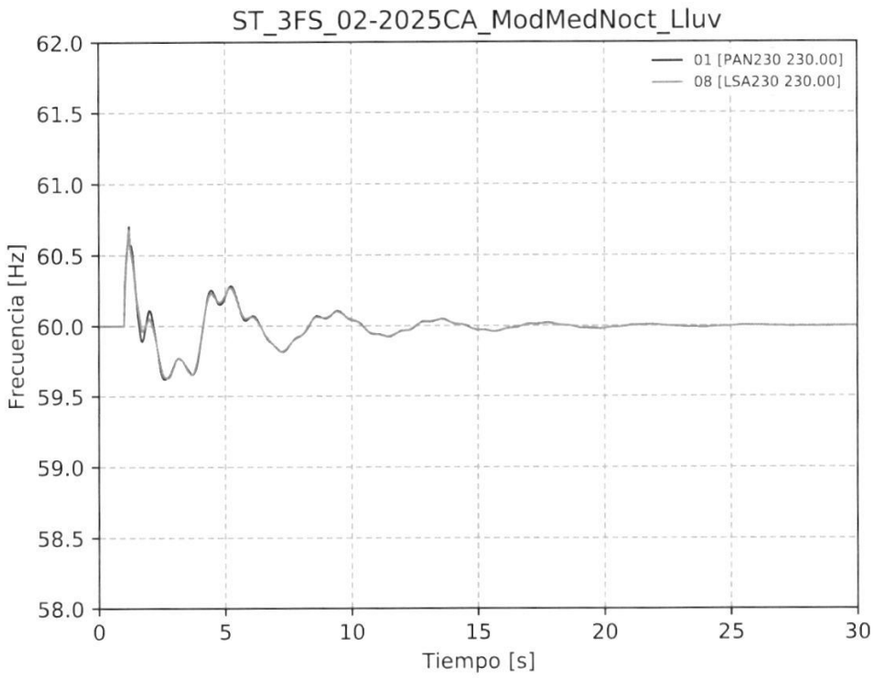
5734


ST_3FS_02-2025CA_ModMedAm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

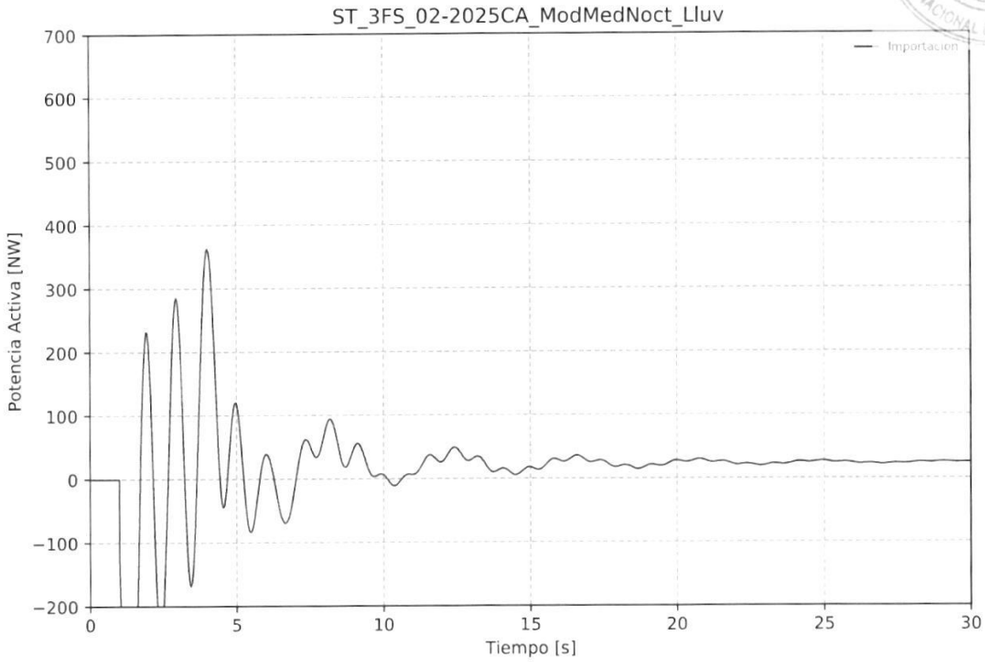

ST_3FS_02-2025CA_ModMedAm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

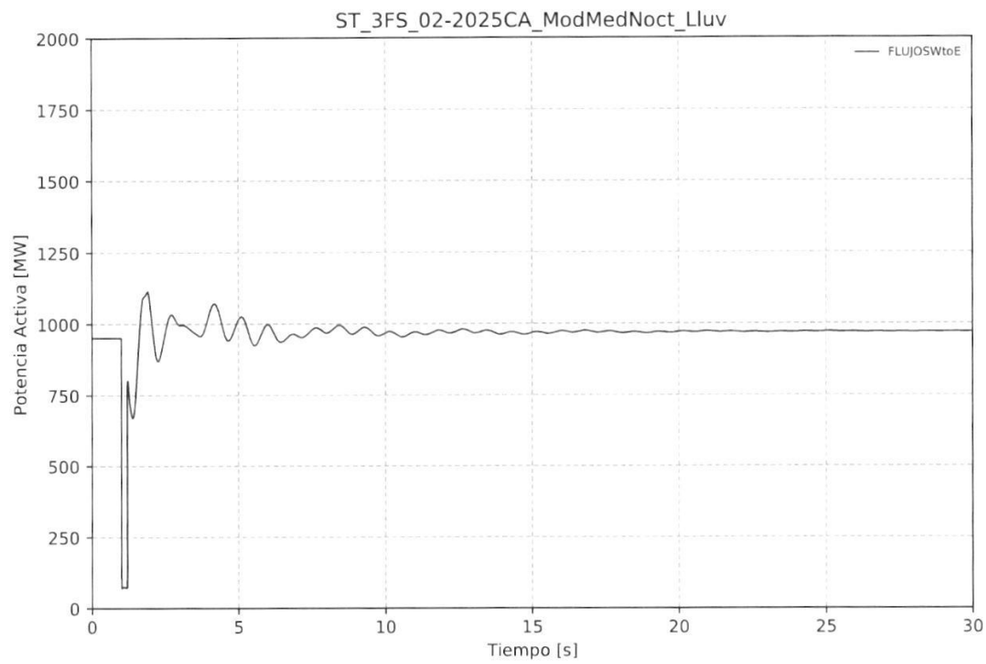
5735


ST_3FS_02-2025CA_ModMedNoct_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

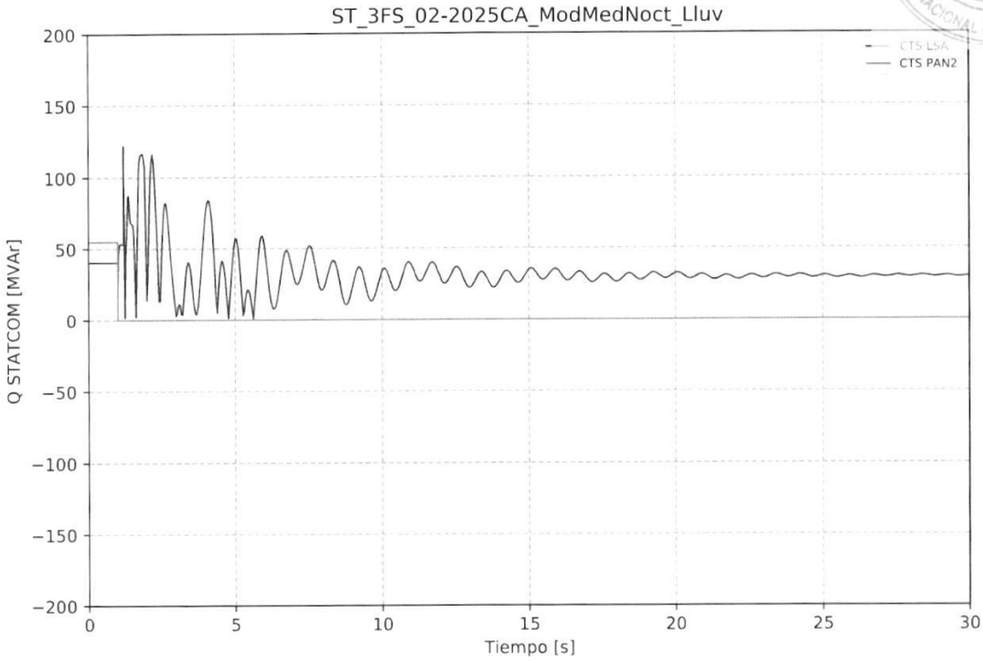

ST_3FS_02-2025CA_ModMedNoct_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

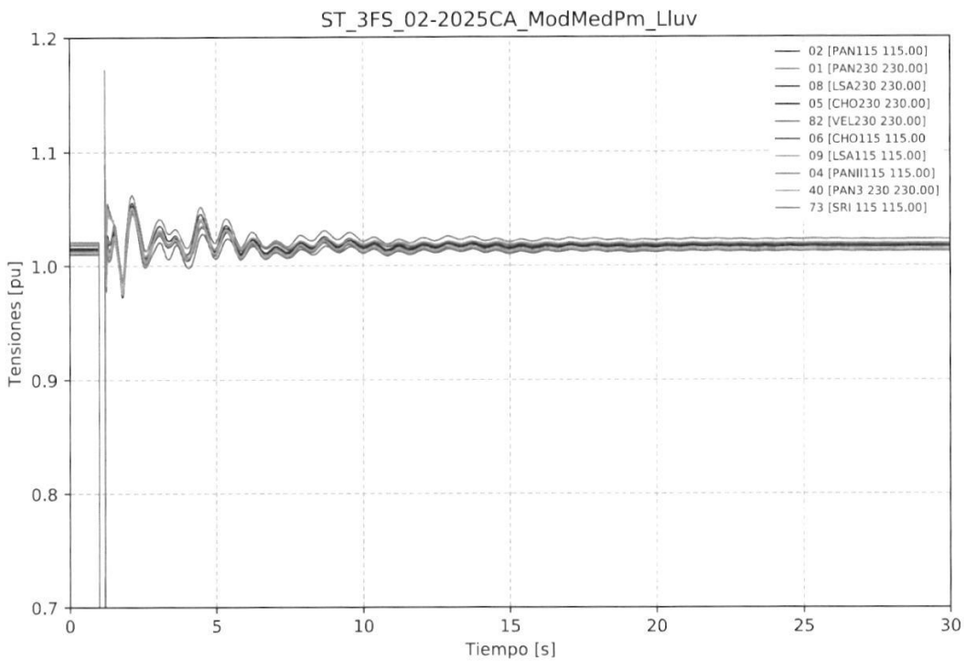
REPÚBLICA DE PANAMÁ
AUTORIDAD NACIONAL DE LOS SERVICIOS PÚBLICOS



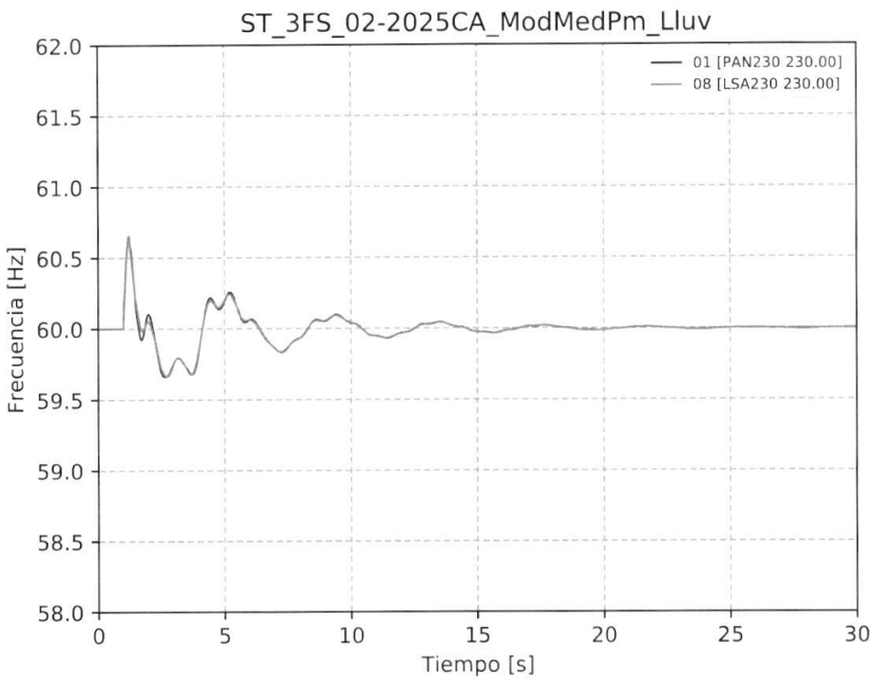


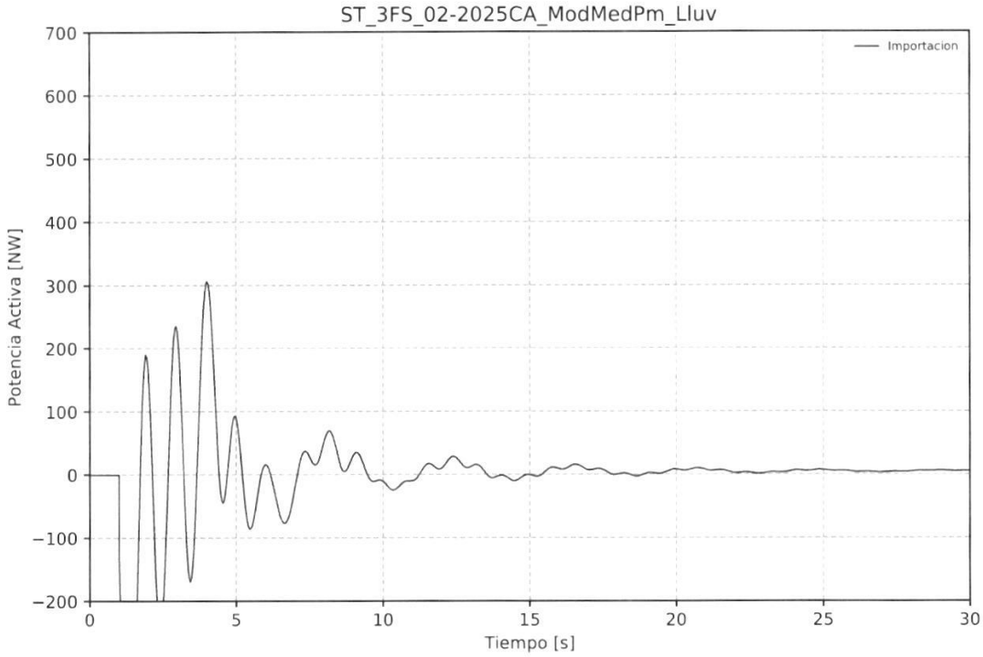
5737


ST_3FS_02-2025CA_ModMedNoct_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

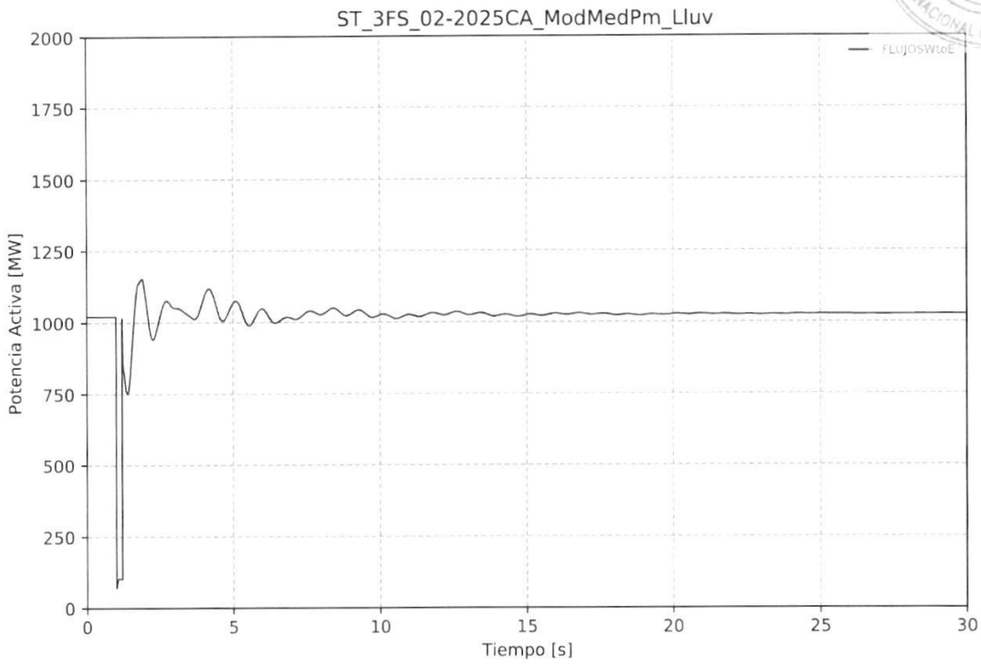

ST_3FS_02-2025CA_ModMedPm_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

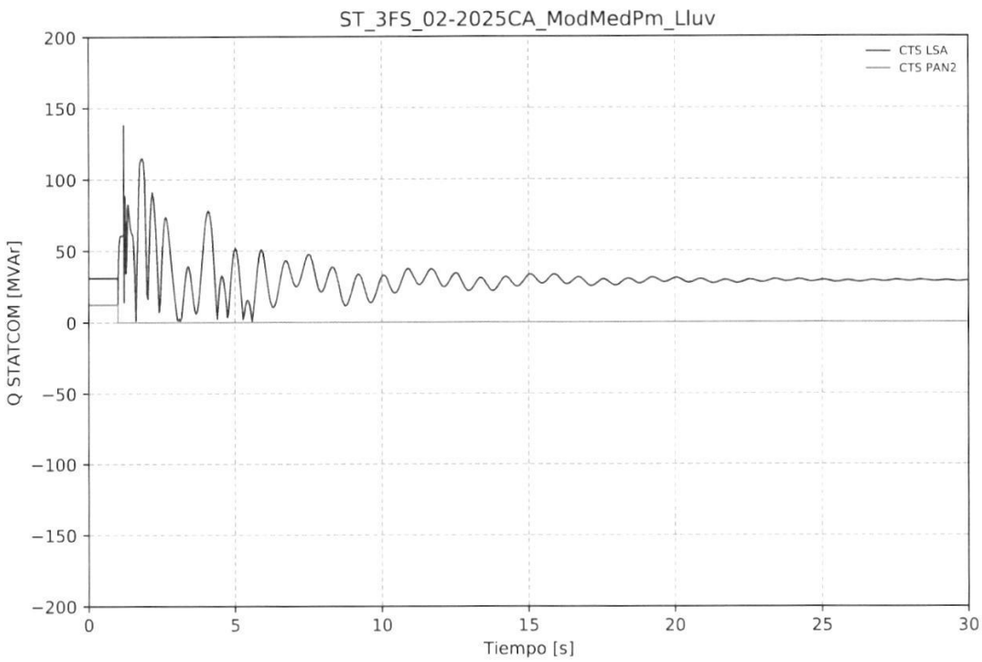
5738


ST_3FS_02-2025CA_ModMedPm_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

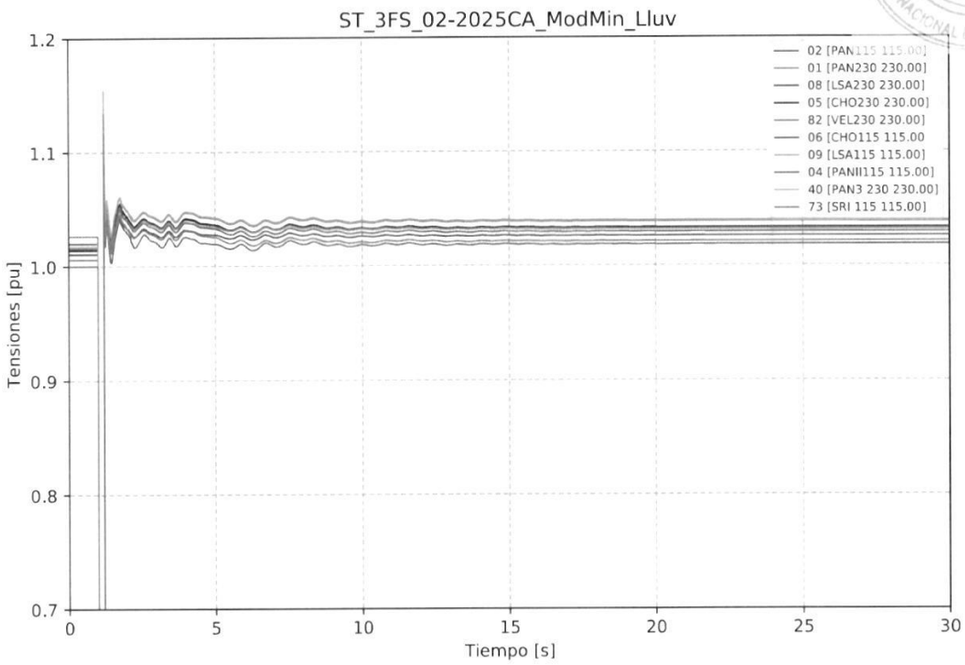

ST_3FS_02-2025CA_ModMedPm_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

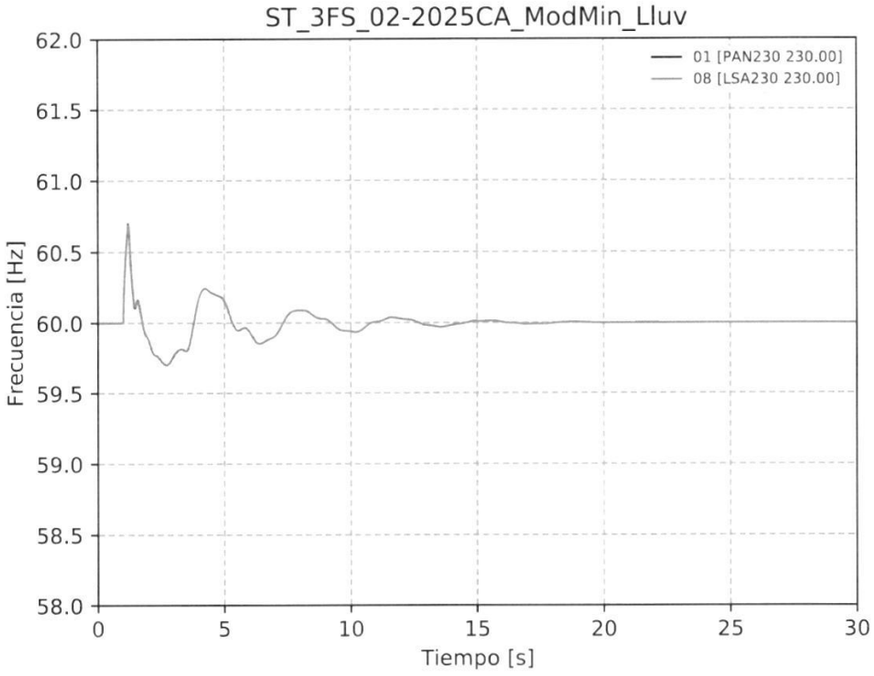
5739


ST_3FS_02-2025CA_ModMedPm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

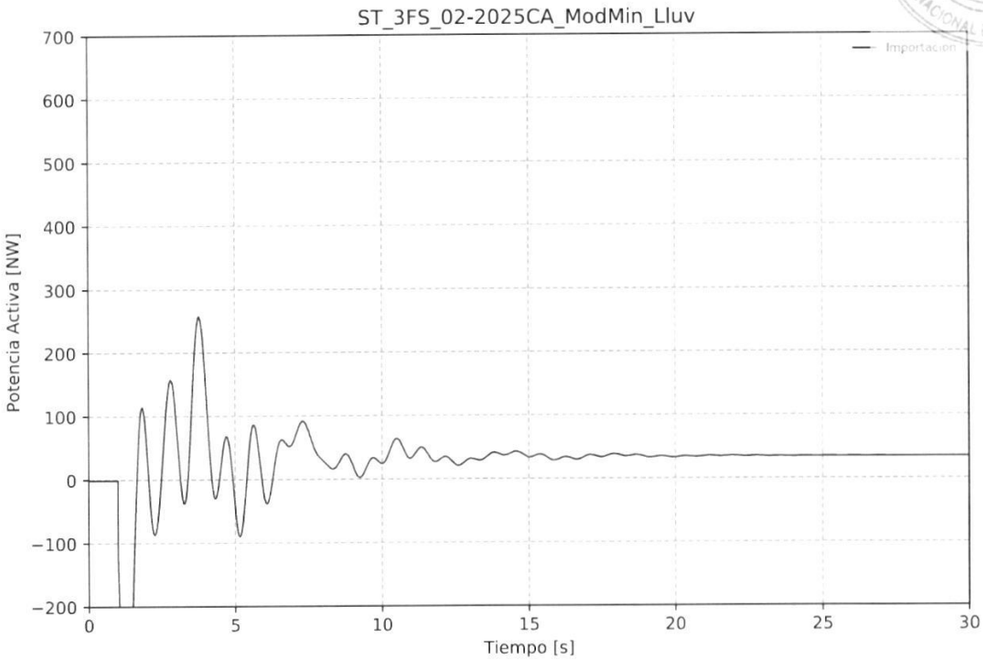

ST_3FS_02-2025CA_ModMedPm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

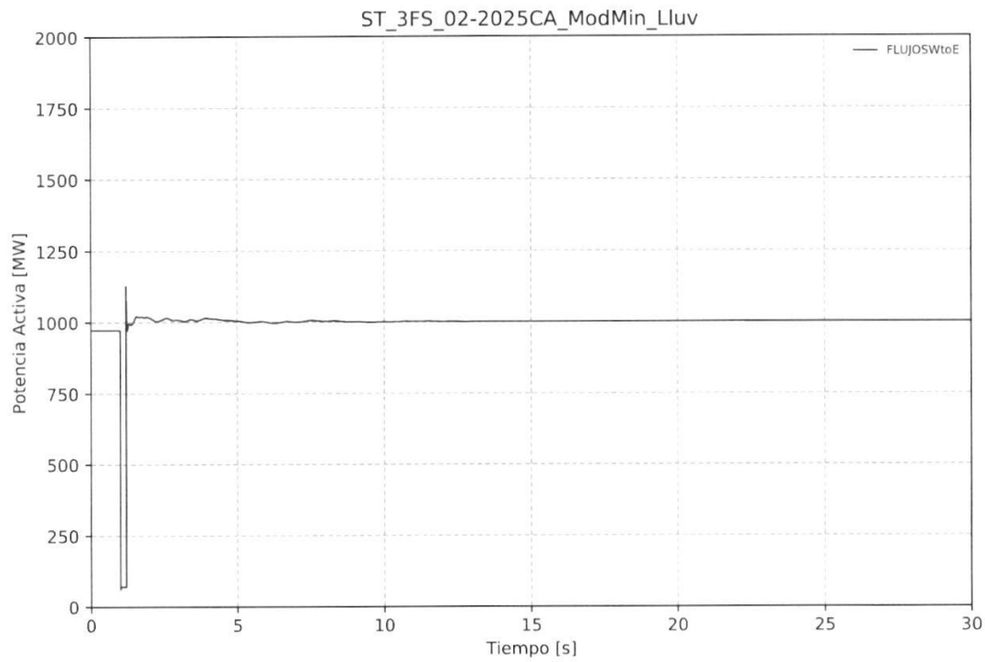
5740


ST_3FS_02-2025CA_ModMin_Lluv
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

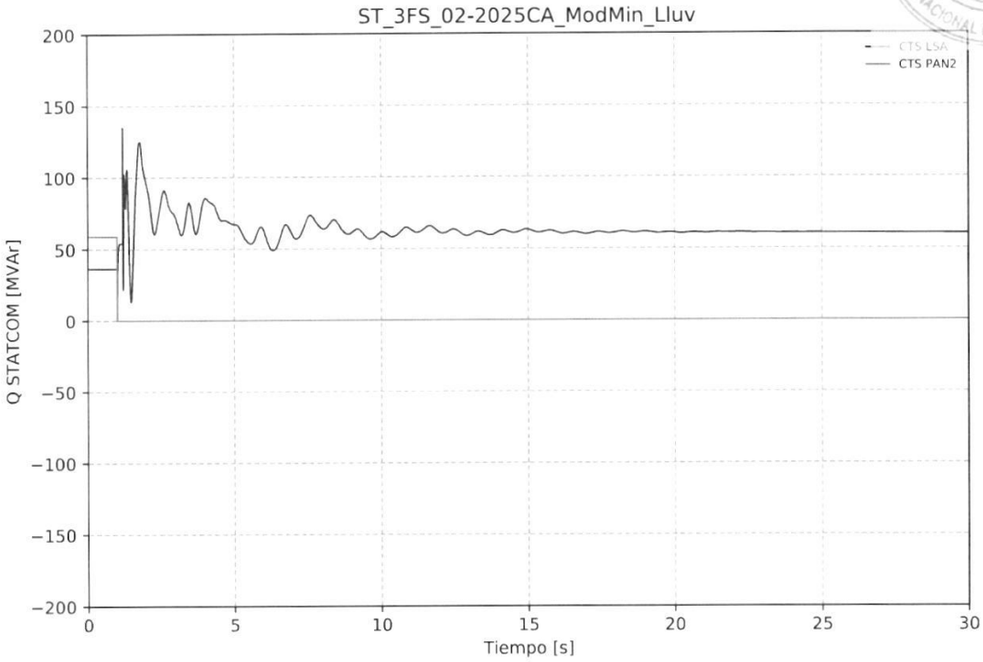

ST_3FS_02-2025CA_ModMin_Lluv
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

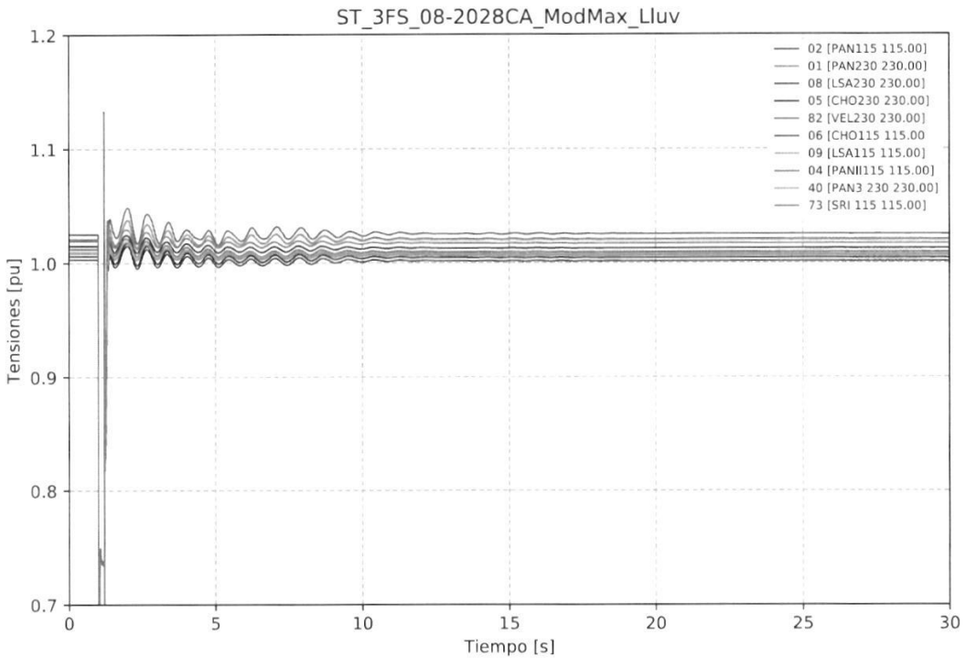
5741


ST_3FS_02-2025CA_ModMin_Lluv
Importación
Potencia Activa [NW]
Tiempo [s]

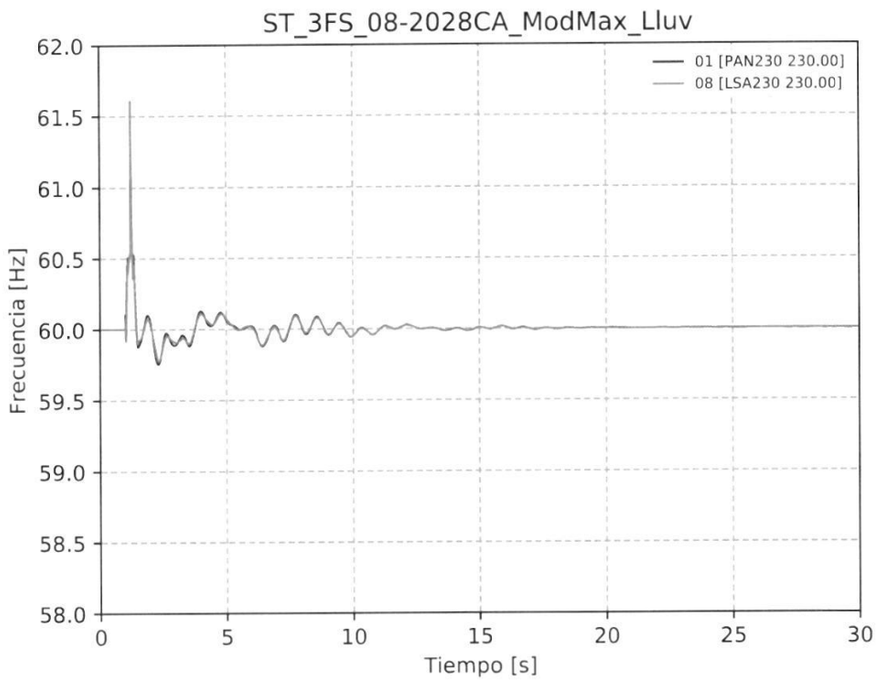

ST_3FS_02-2025CA_ModMin_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

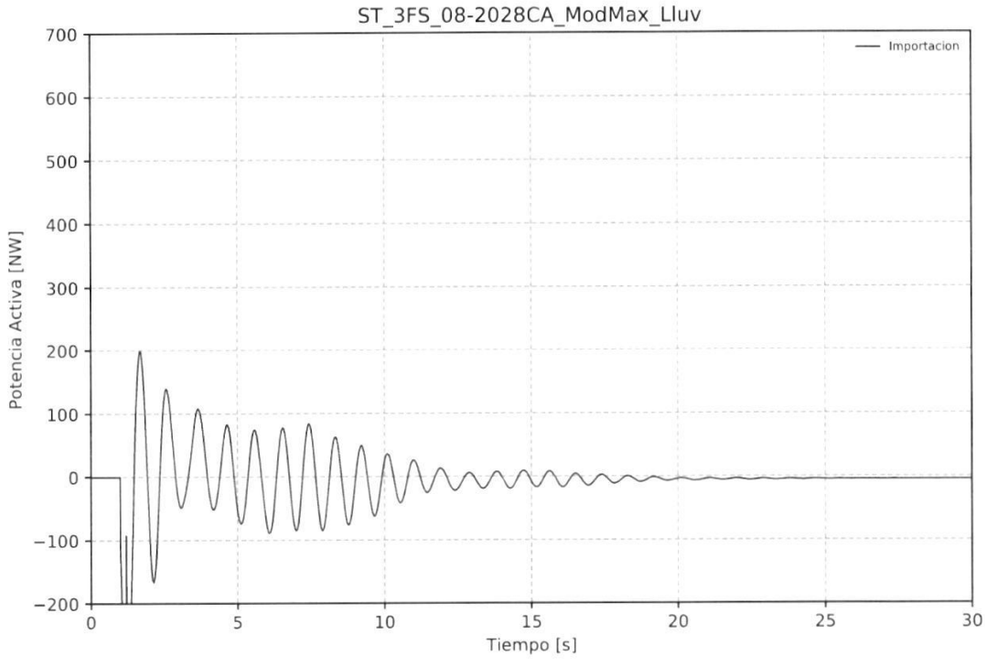
5742


ST_3FS_02-2025CA_ModMin_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

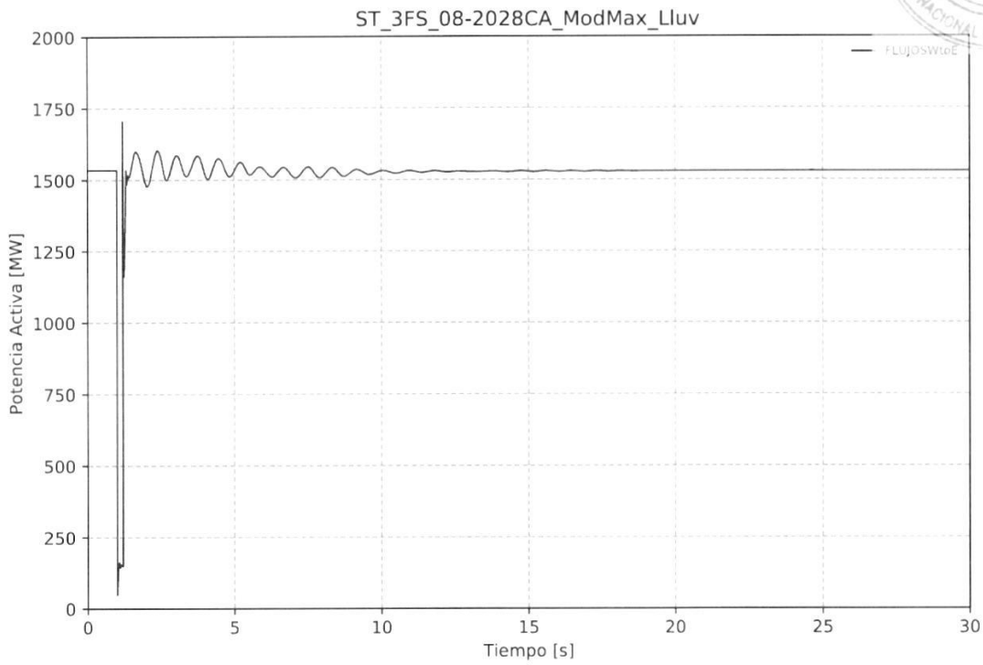

ST_3FS_08-2028CA_ModMax_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

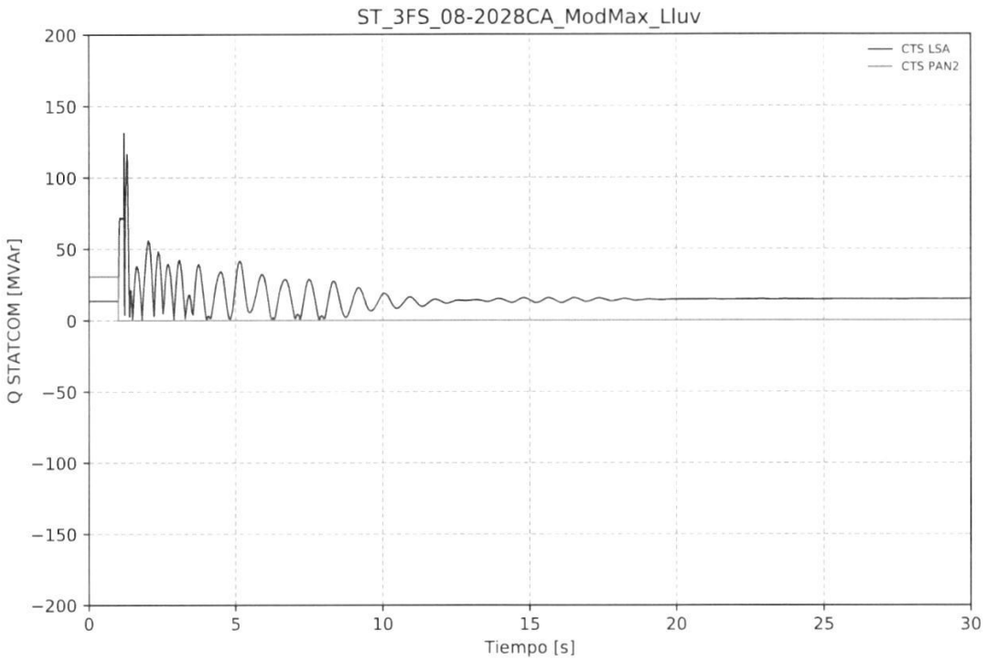
5743


ST_3FS_08-2028CA_ModMax_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

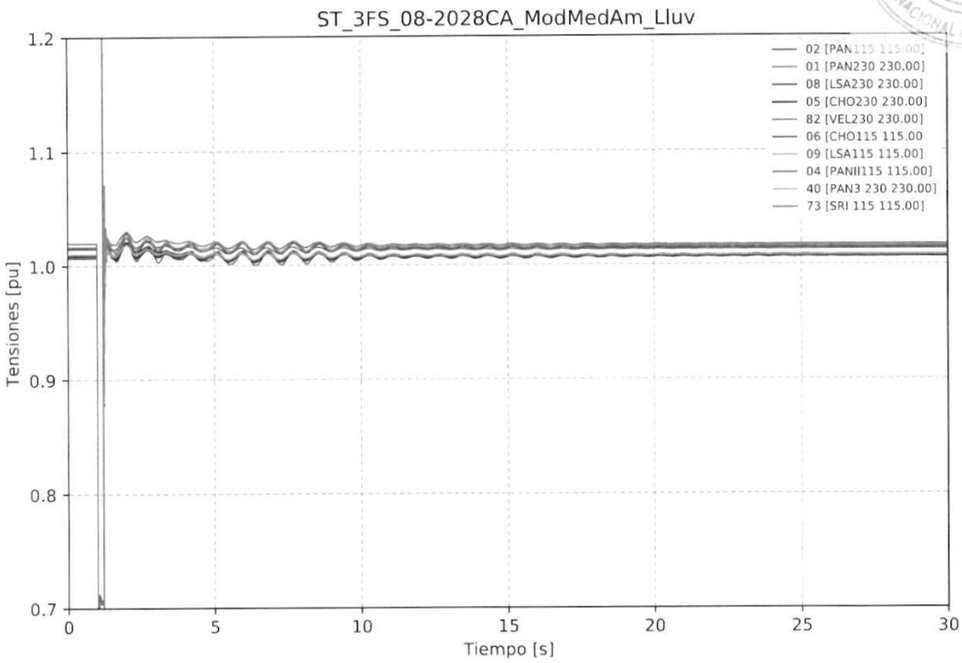

ST_3FS_08-2028CA_ModMax_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

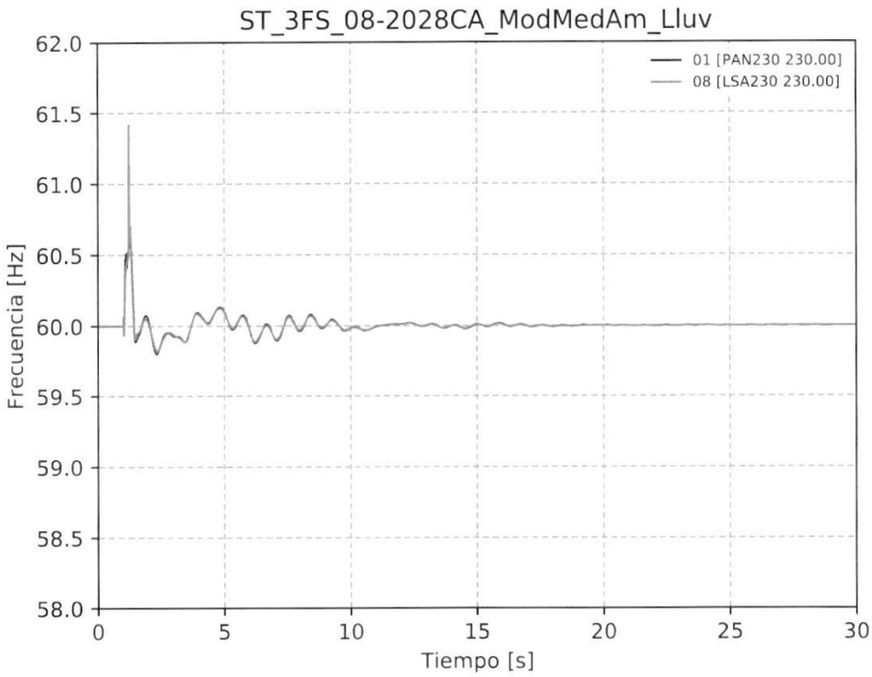
5744


ST_3FS_08-2028CA_ModMax_Lluv
FLUJOSWIDE
Potencia Activa [MW]
Tiempo [s]

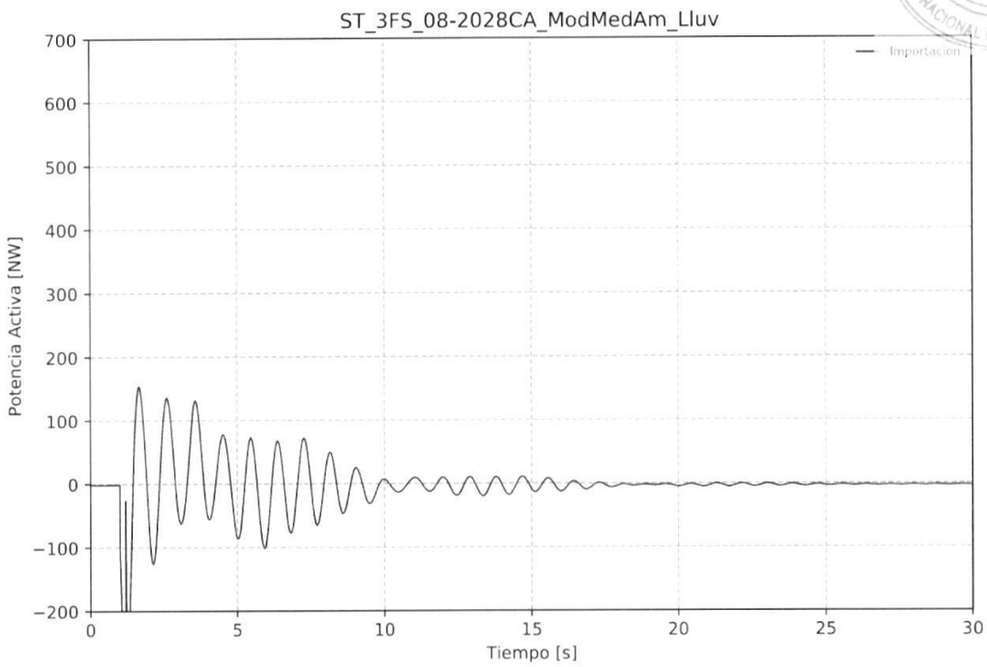

ST_3FS_08-2028CA_ModMax_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

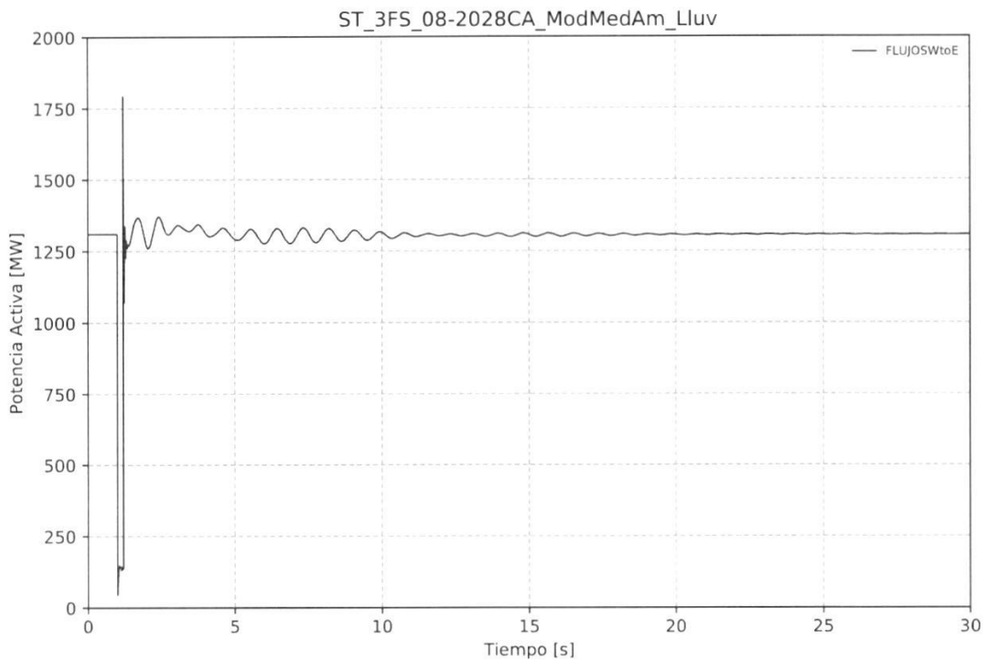
5745


ST_3FS_08-2028CA_ModMedAm_Lluv
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

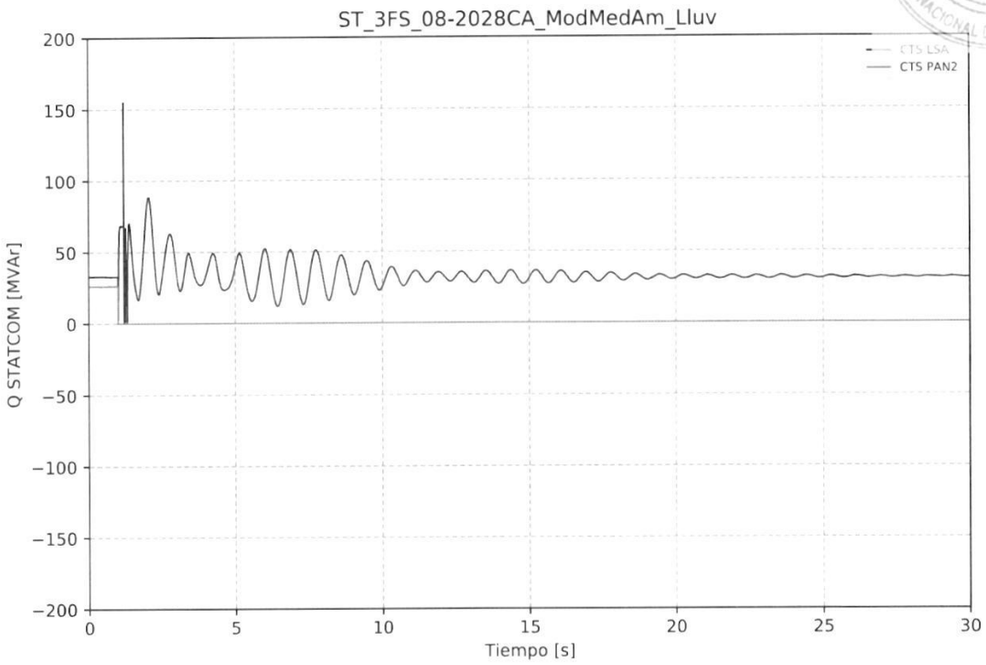

ST_3FS_08-2028CA_ModMedAm_Lluv
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

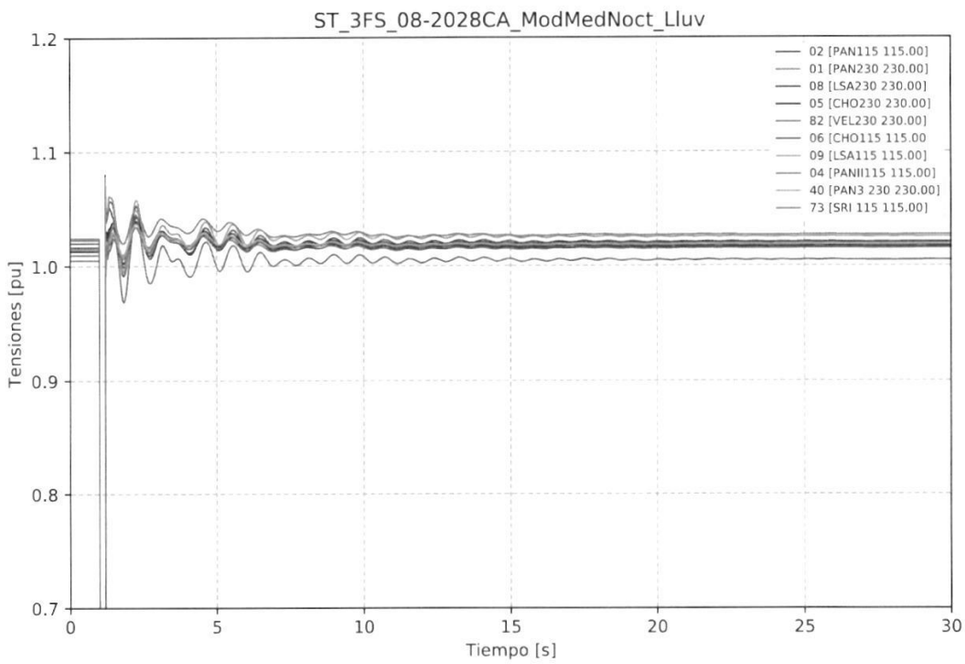
5746


ST_3FS_08-2028CA_ModMedAm_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

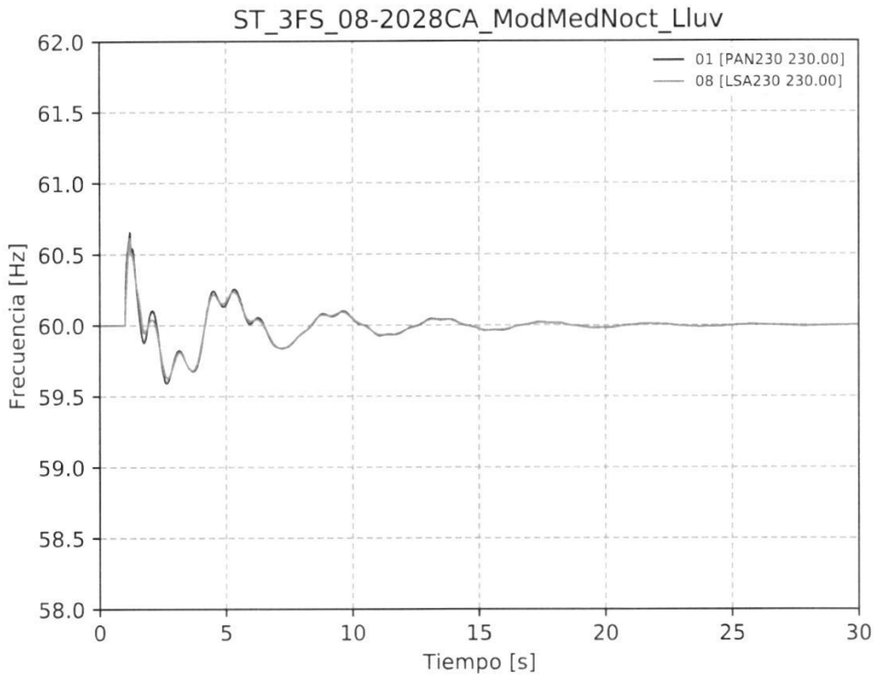

ST_3FS_08-2028CA_ModMedAm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

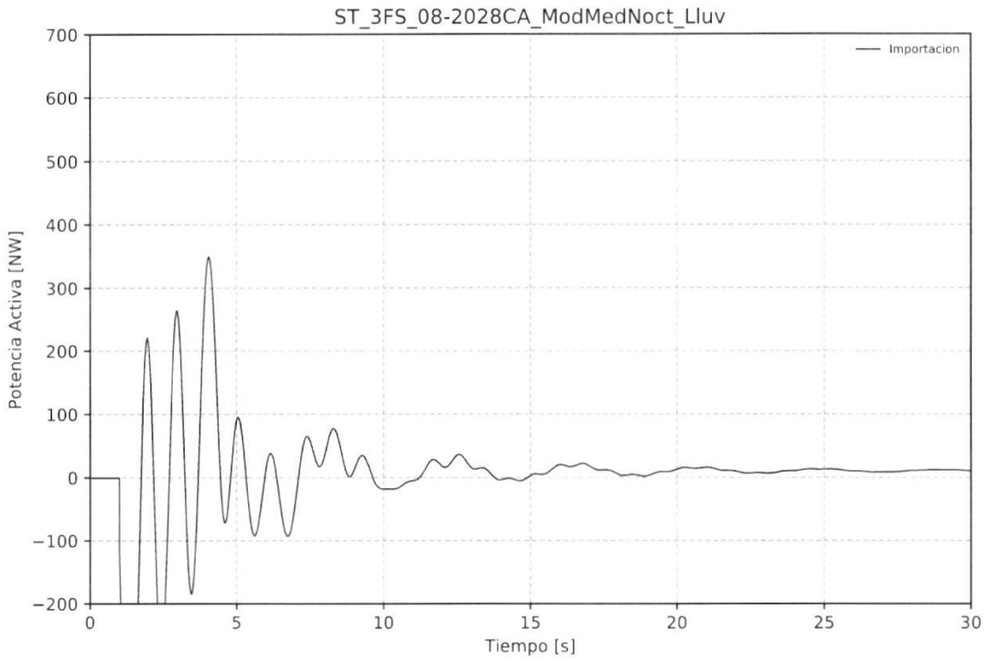
5747


ST_3FS_08-2028CA_ModMedAm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

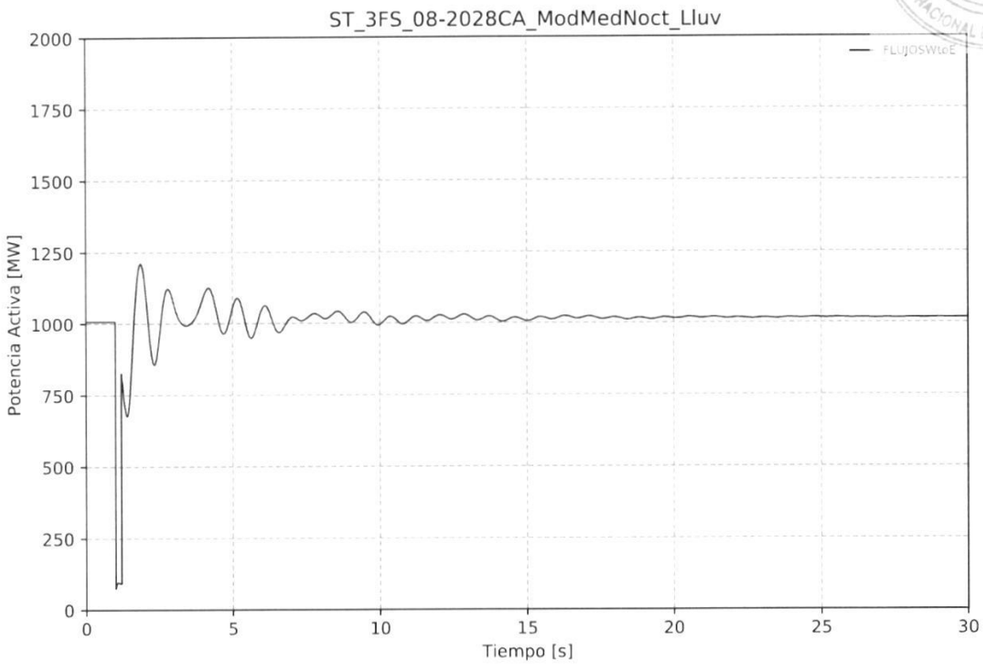

ST_3FS_08-2028CA_ModMedNoct_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

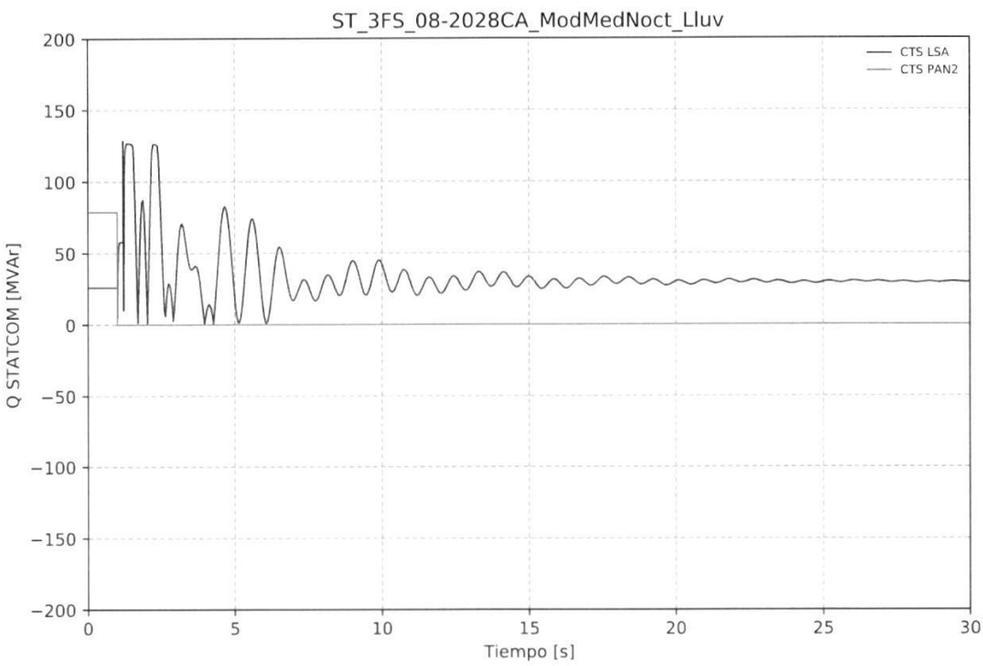
5748


ST_3FS_08-2028CA_ModMedNoct_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

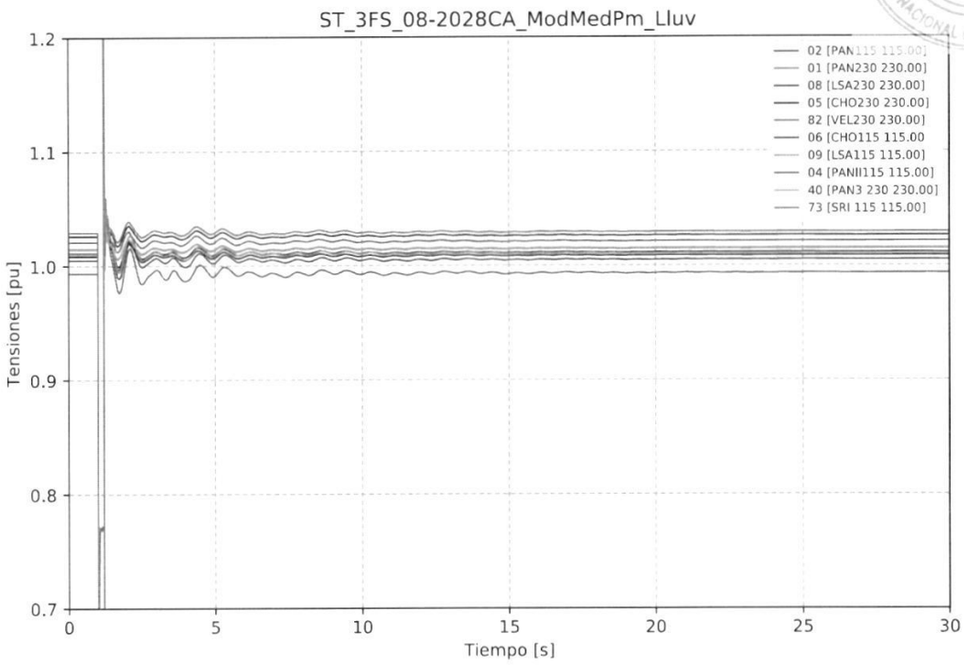

ST_3FS_08-2028CA_ModMedNoct_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

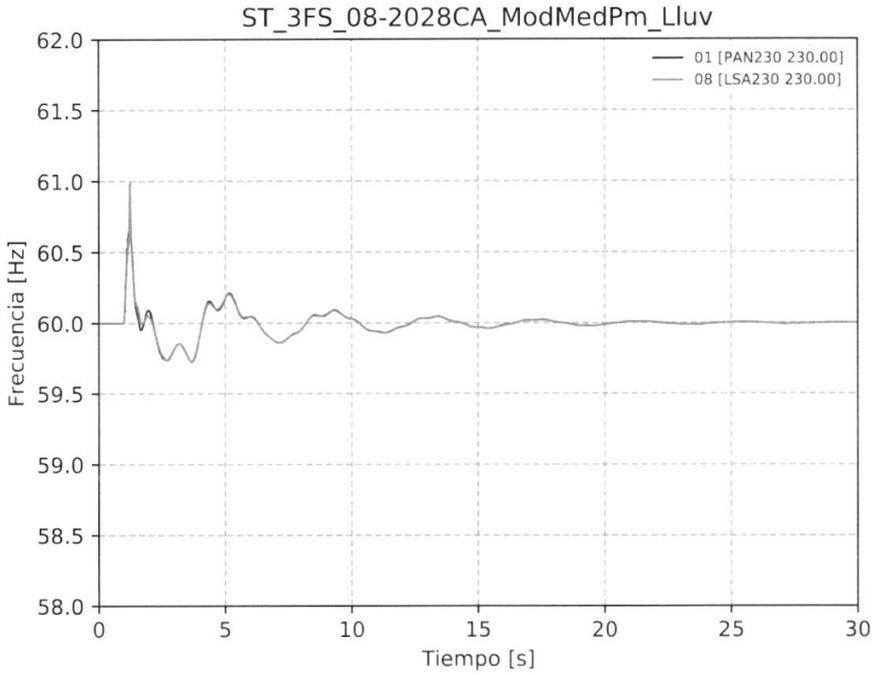
5749


ST_3FS_08-2028CA_ModMedNoct_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

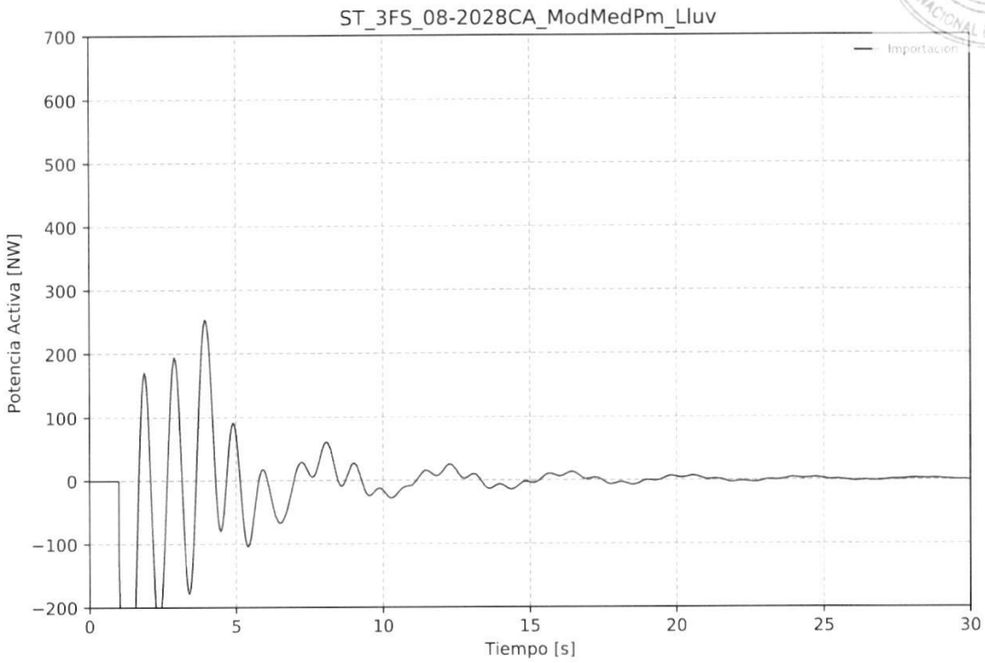

ST_3FS_08-2028CA_ModMedNoct_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

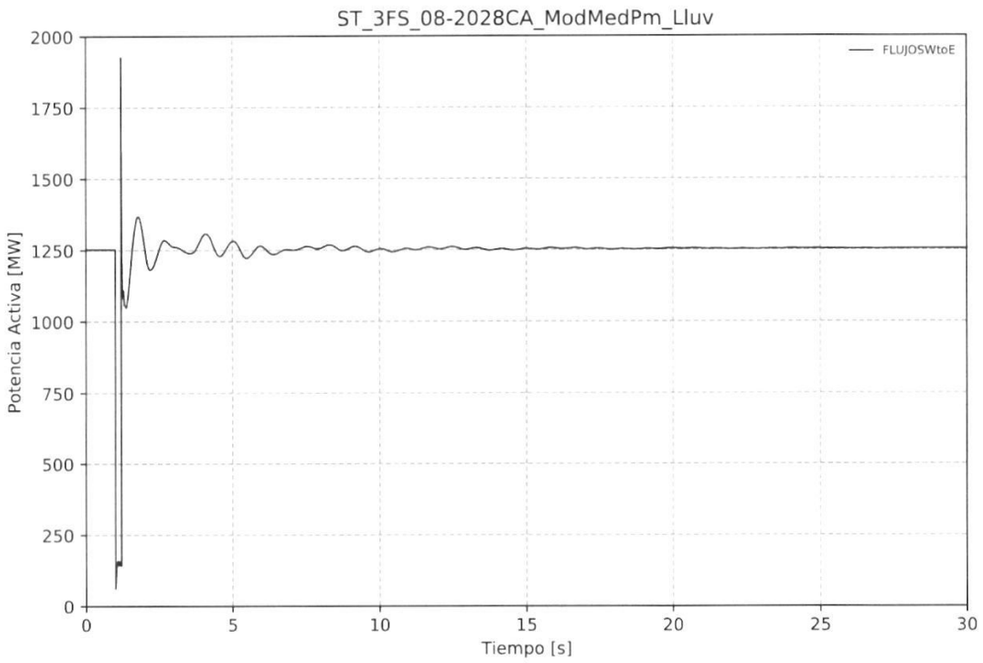
5750


ST_3FS_08-2028CA_ModMedPm_Lluv
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

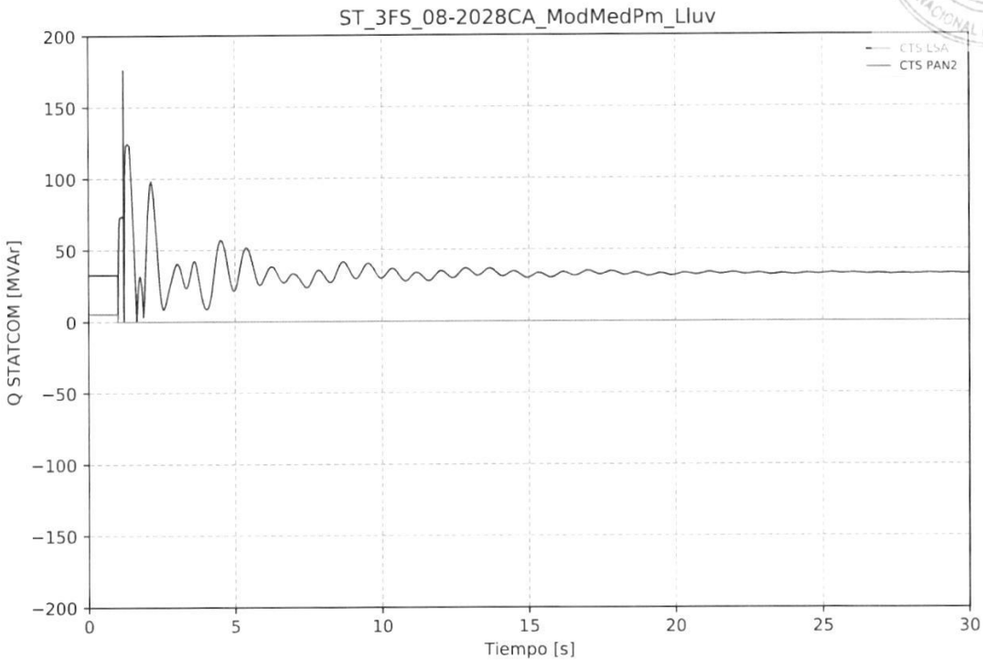

ST_3FS_08-2028CA_ModMedPm_Lluv
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

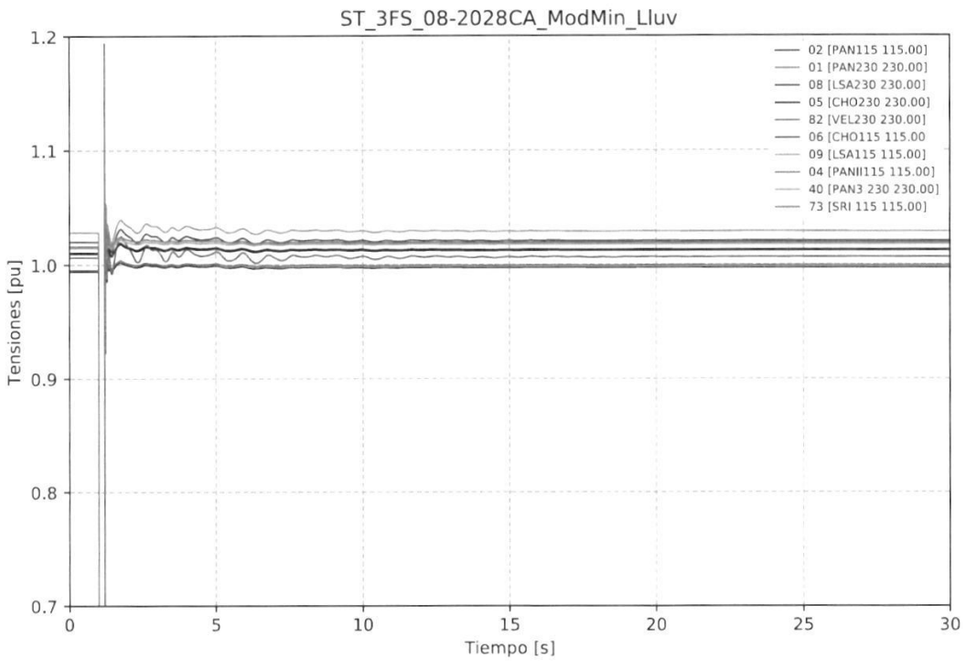
5751


ST_3FS_08-2028CA_ModMedPm_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

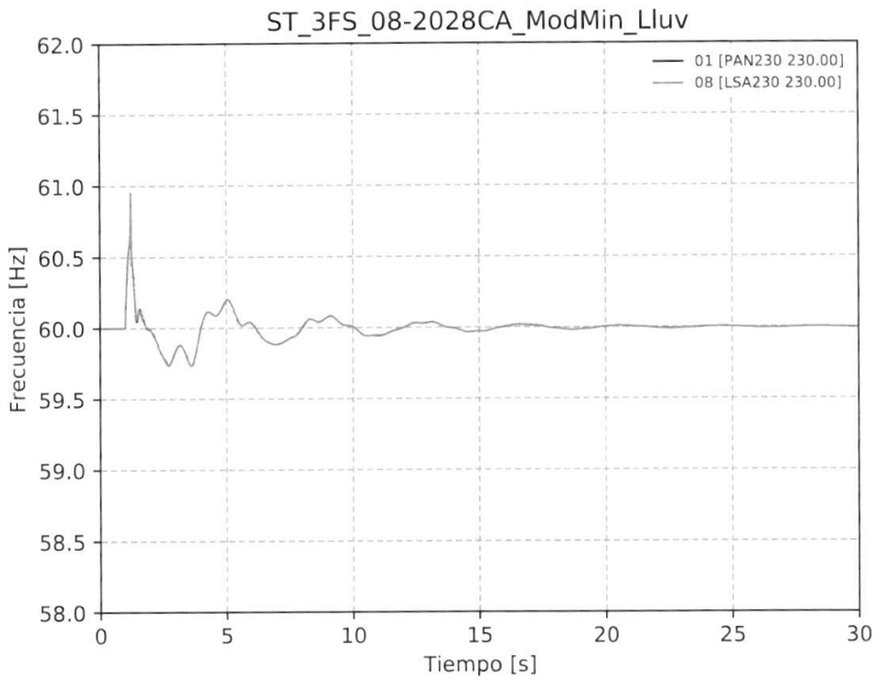

ST_3FS_08-2028CA_ModMedPm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

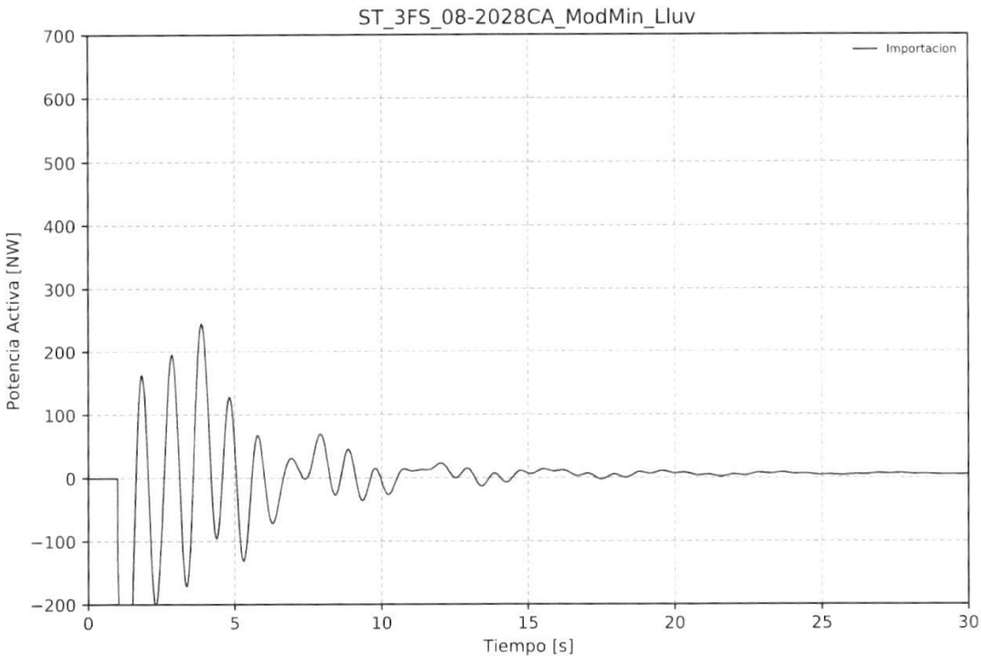
5752


ST_3FS_08-2028CA_ModMedPm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

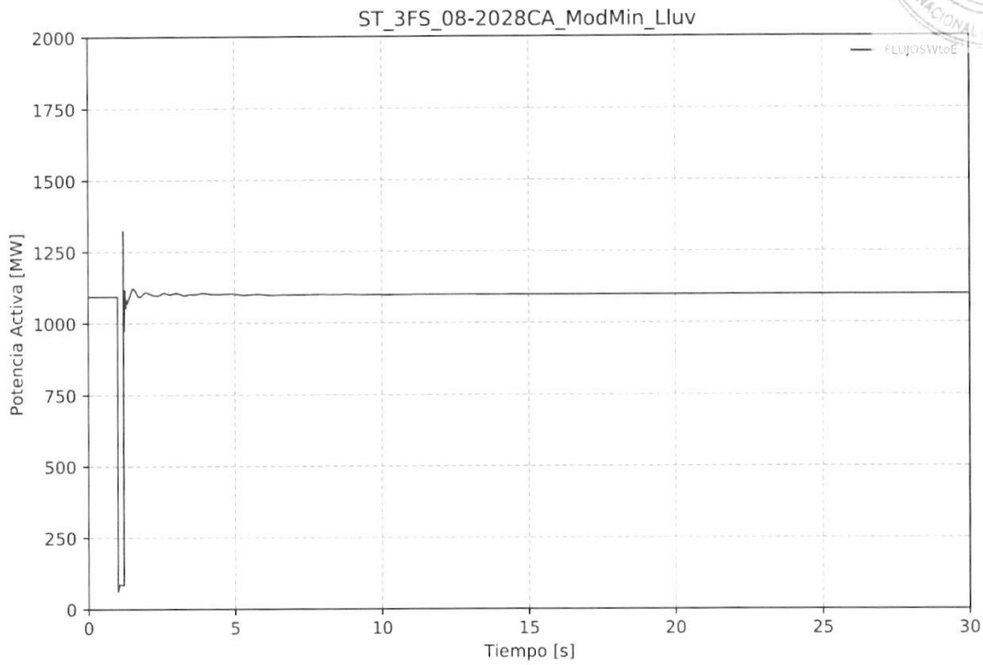

ST_3FS_08-2028CA_ModMin_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

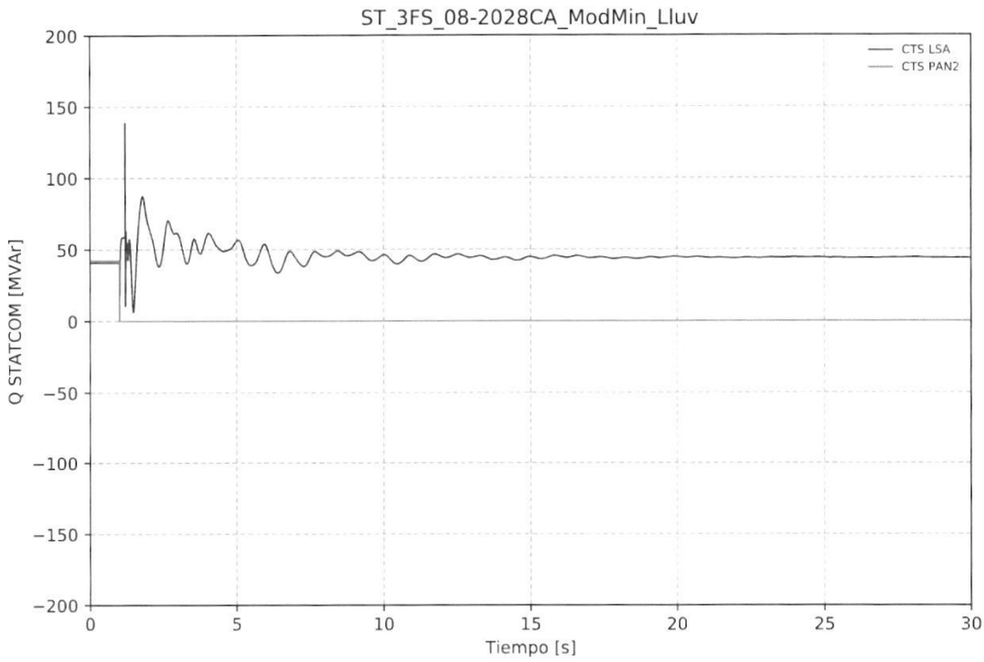
5753


ST_3FS_08-2028CA_ModMin_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]


ST_3FS_08-2028CA_ModMin_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

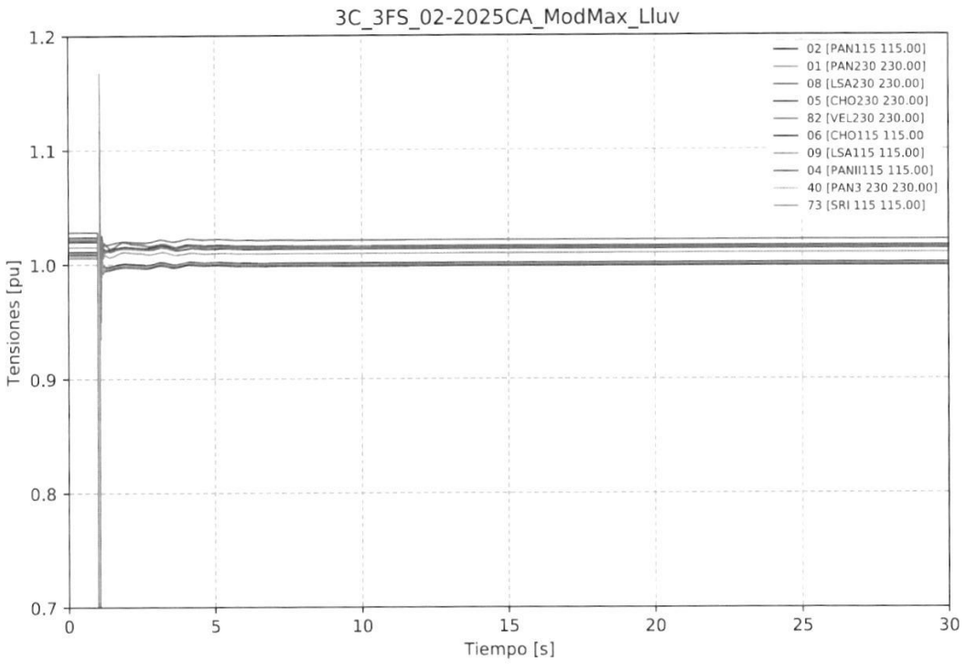
5754


ST_3FS_08-2028CA_ModMin_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

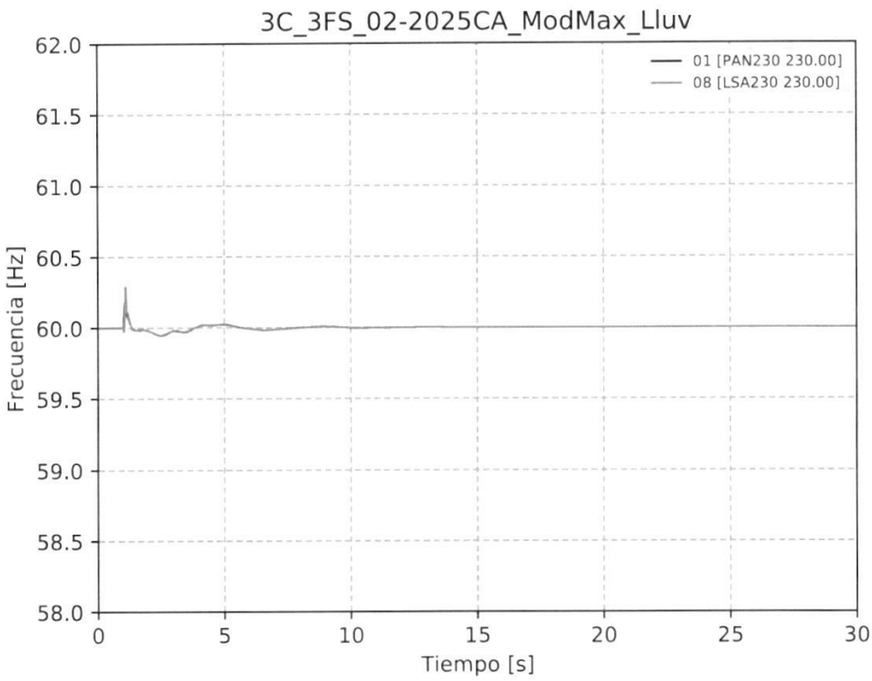

ST_3FS_08-2028CA_ModMin_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

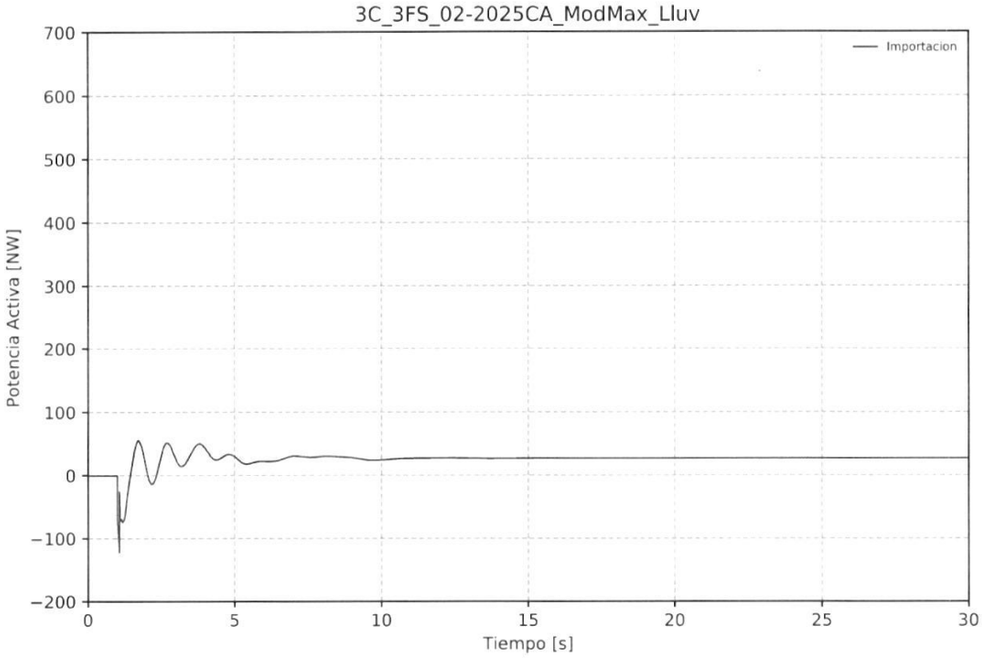
5755

5. FALLAS DE LÍNEAS DE TRANSMISIÓN

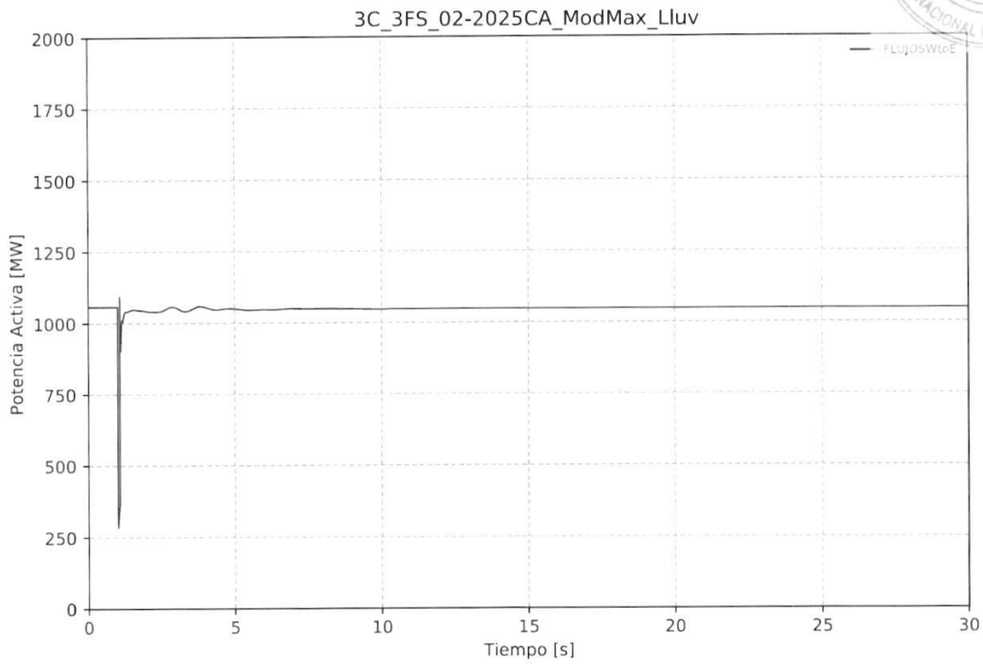


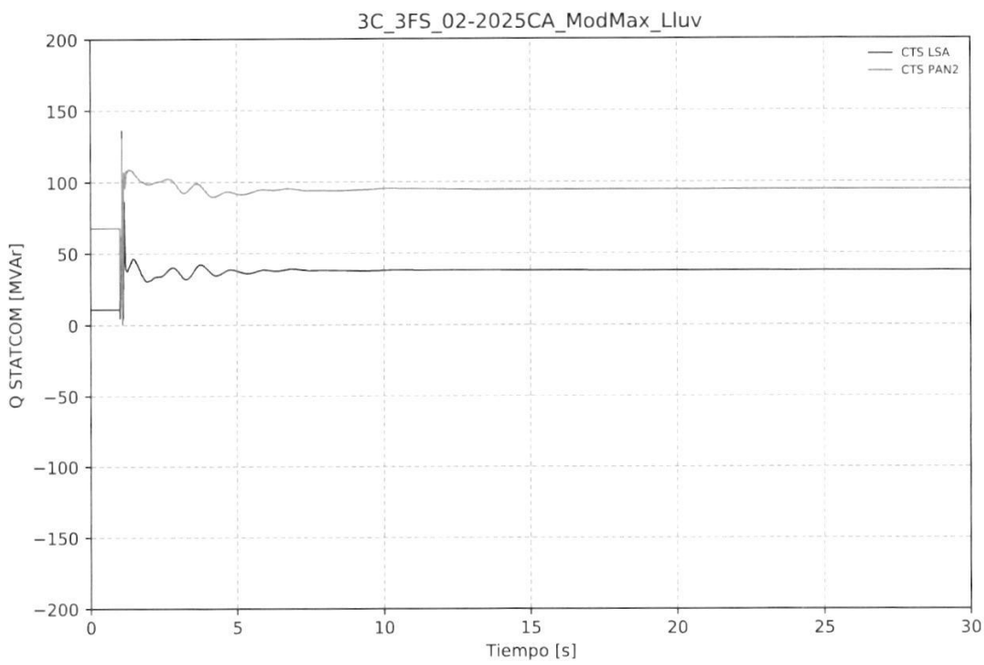
5756


3C_3FS_02-2025CA_ModMax_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

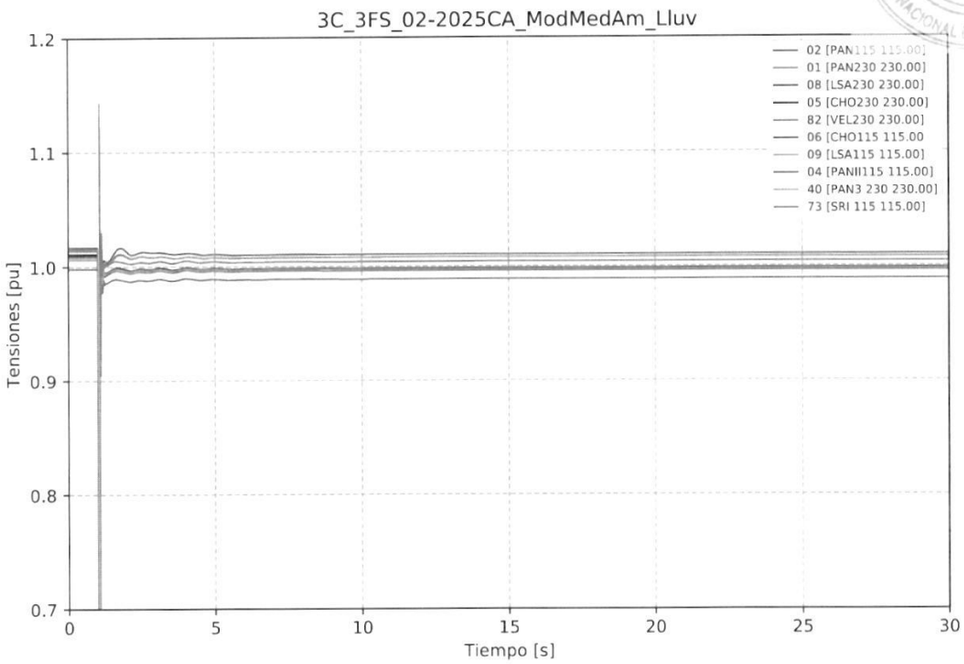

3C_3FS_02-2025CA_ModMax_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

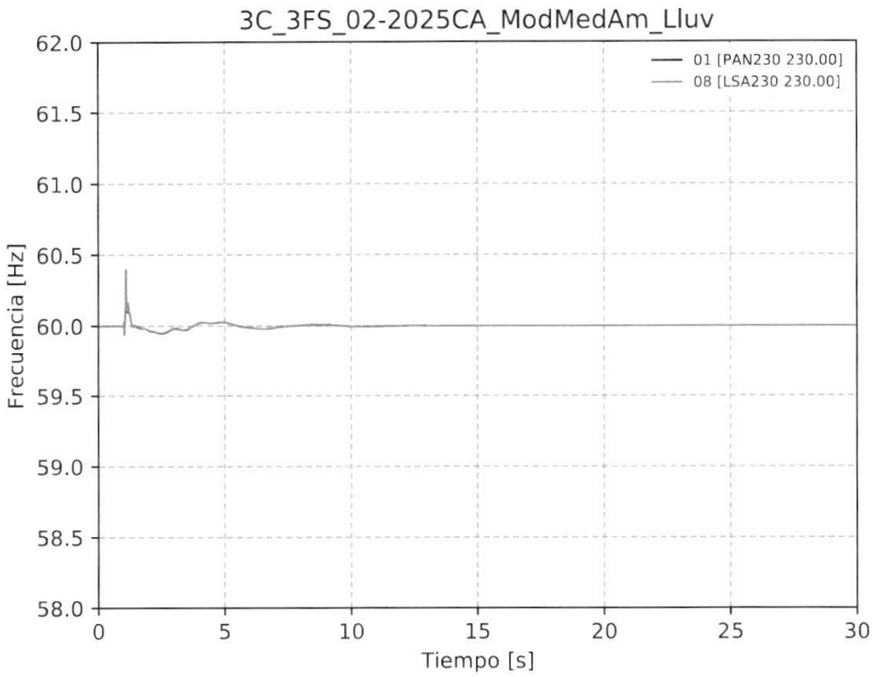
5757


3C_3FS_02-2025CA_ModMax_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

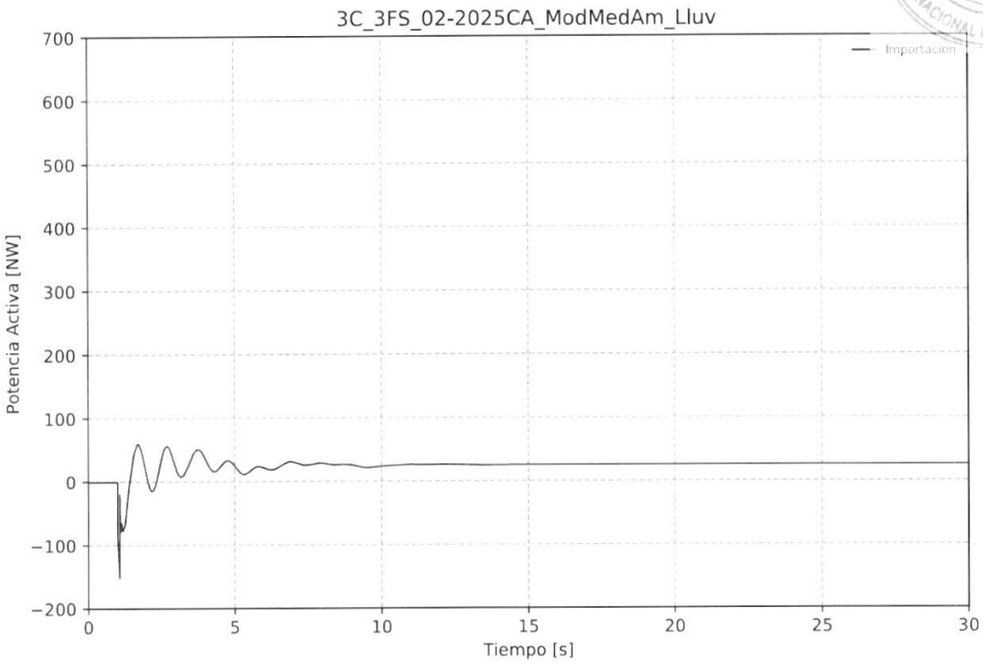

3C_3FS_02-2025CA_ModMax_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

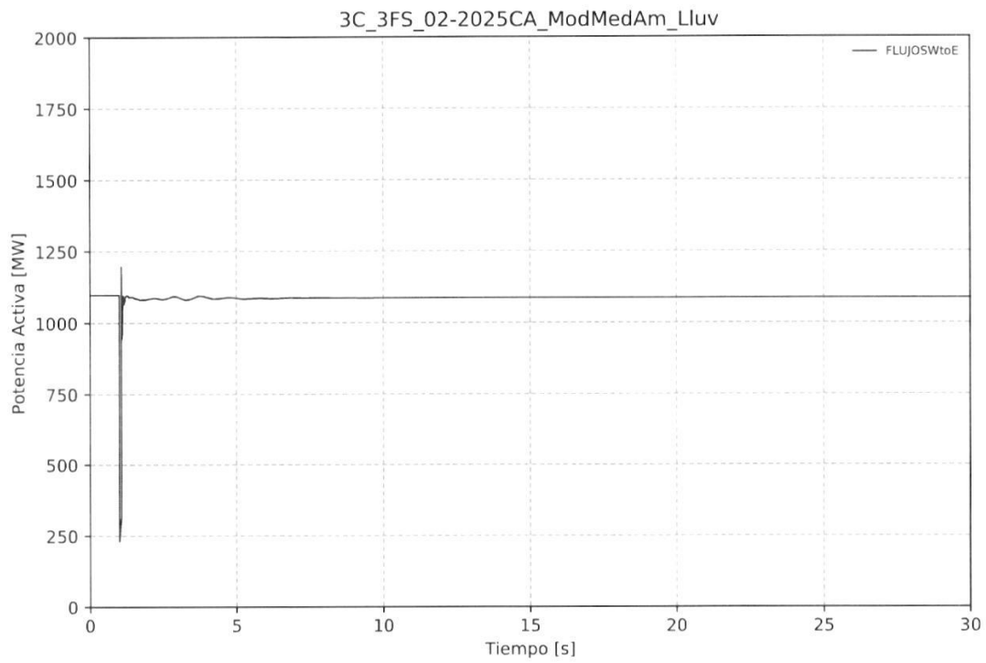
5758


3C_3FS_02-2025CA_ModMedAm_Lluv
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

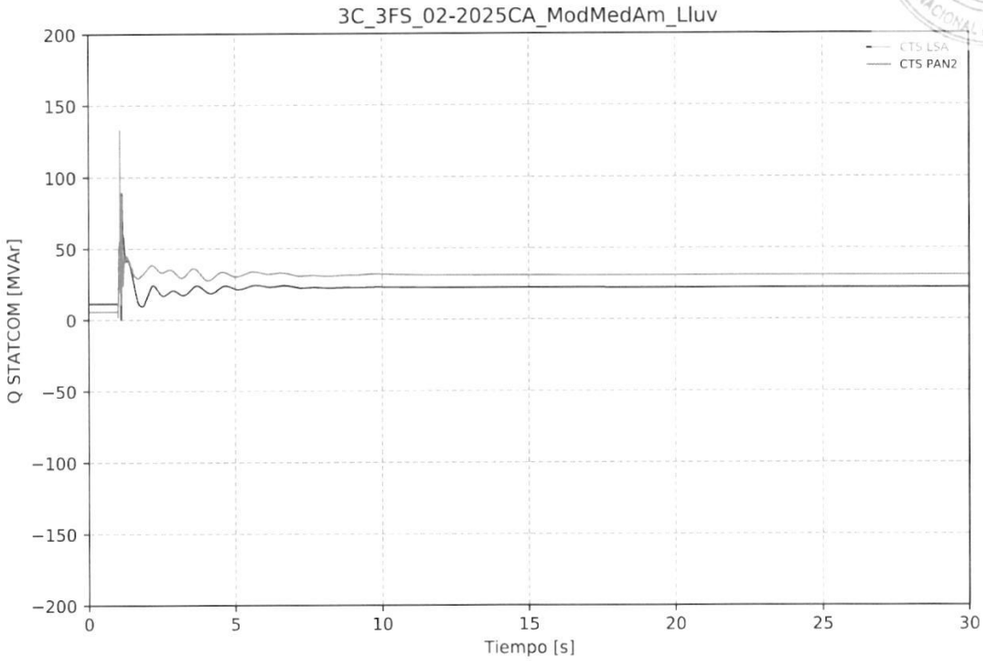

3C_3FS_02-2025CA_ModMedAm_Lluv
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

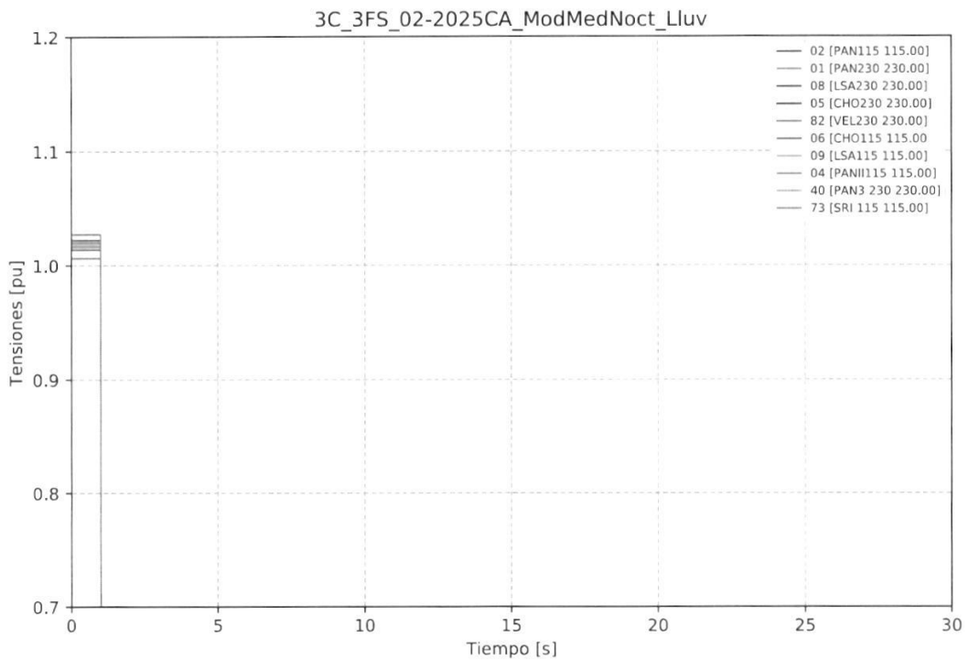
5759


3C_3FS_02-2025CA_ModMedAm_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

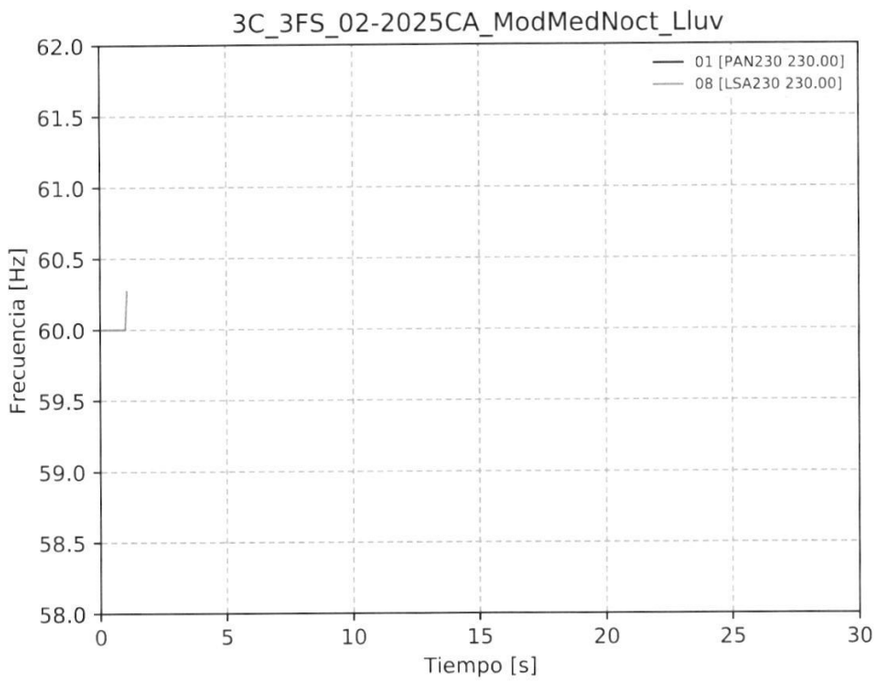

3C_3FS_02-2025CA_ModMedAm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

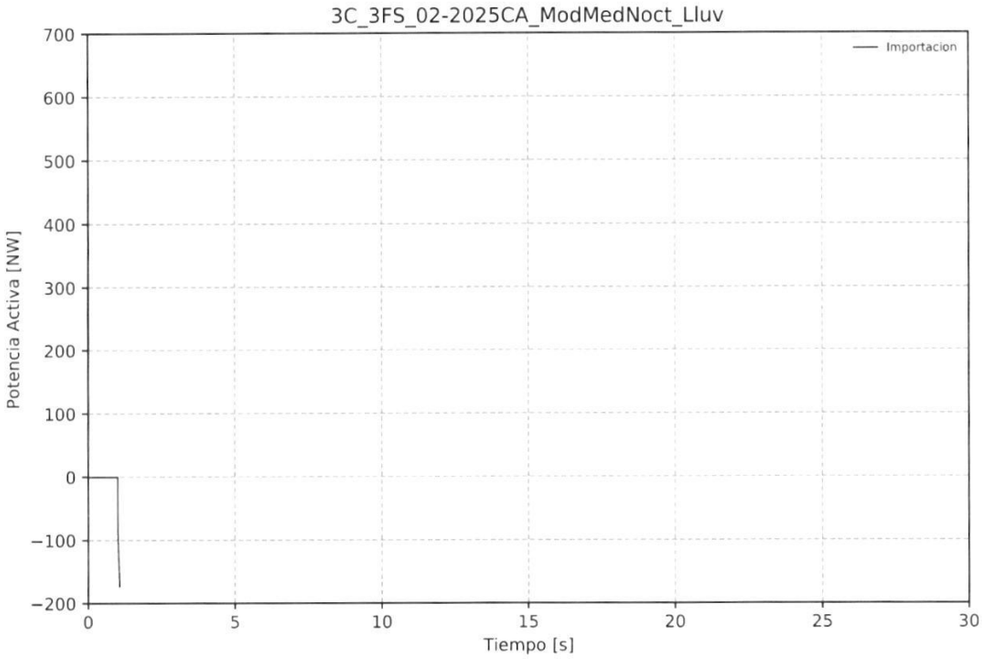
5760


3C_3FS_02-2025CA_ModMedAm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

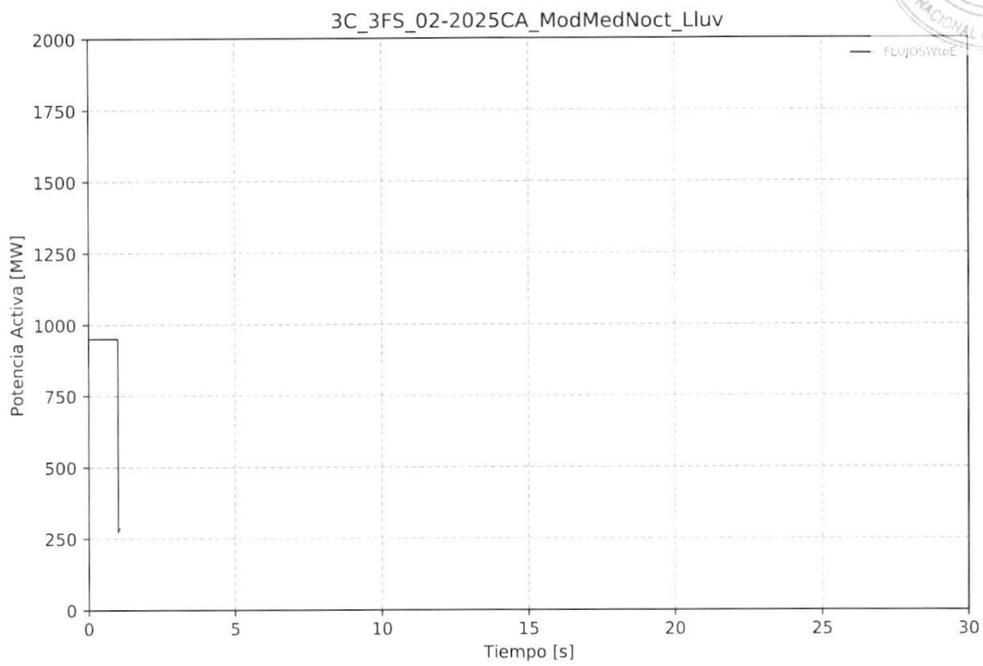

3C_3FS_02-2025CA_ModMedNoct_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

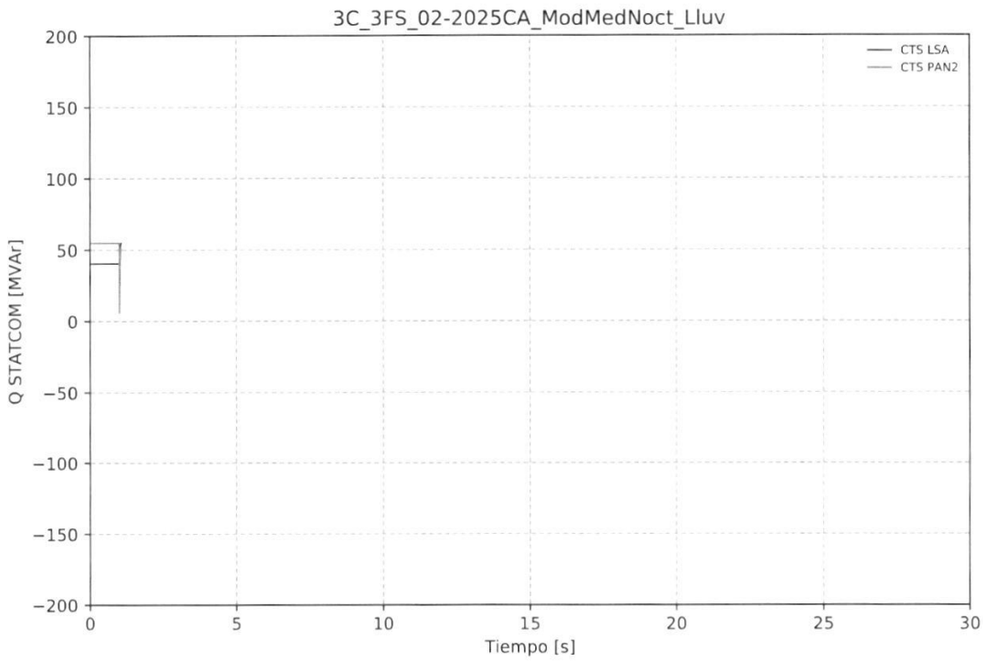
5761


3C_3FS_02-2025CA_ModMedNoct_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

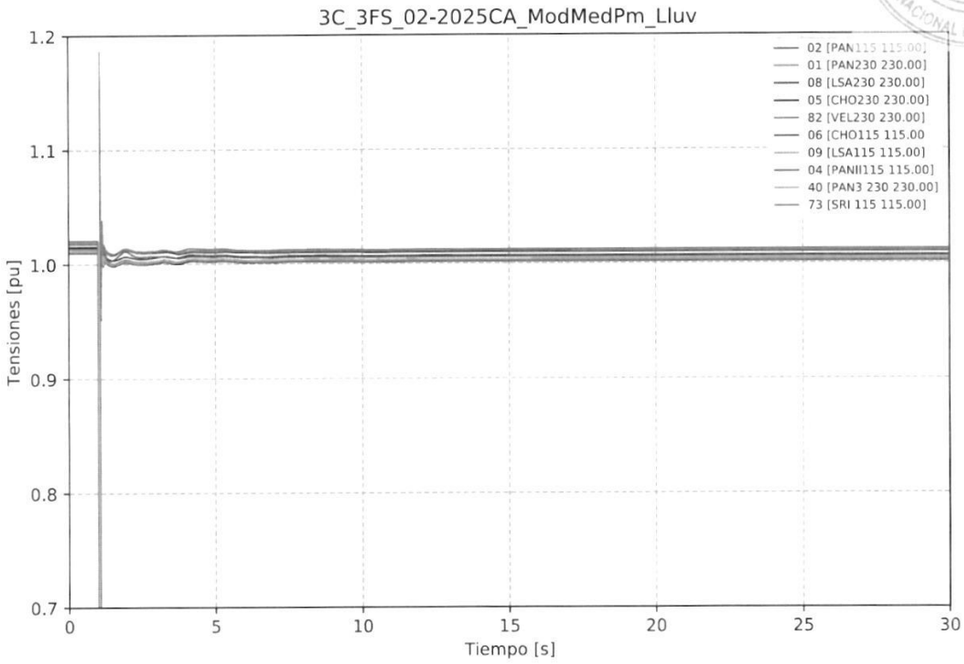

3C_3FS_02-2025CA_ModMedNoct_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

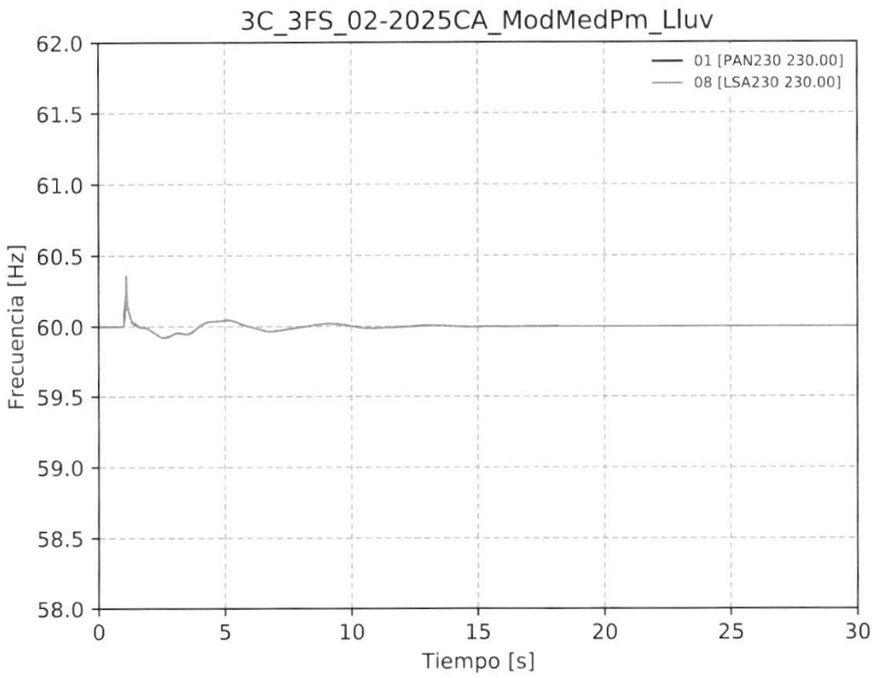
5762


3C_3FS_02-2025CA_ModMedNoct_Lluv
FLUJOSWtoE
Potencia Activa [MW]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30
Tiempo [s]

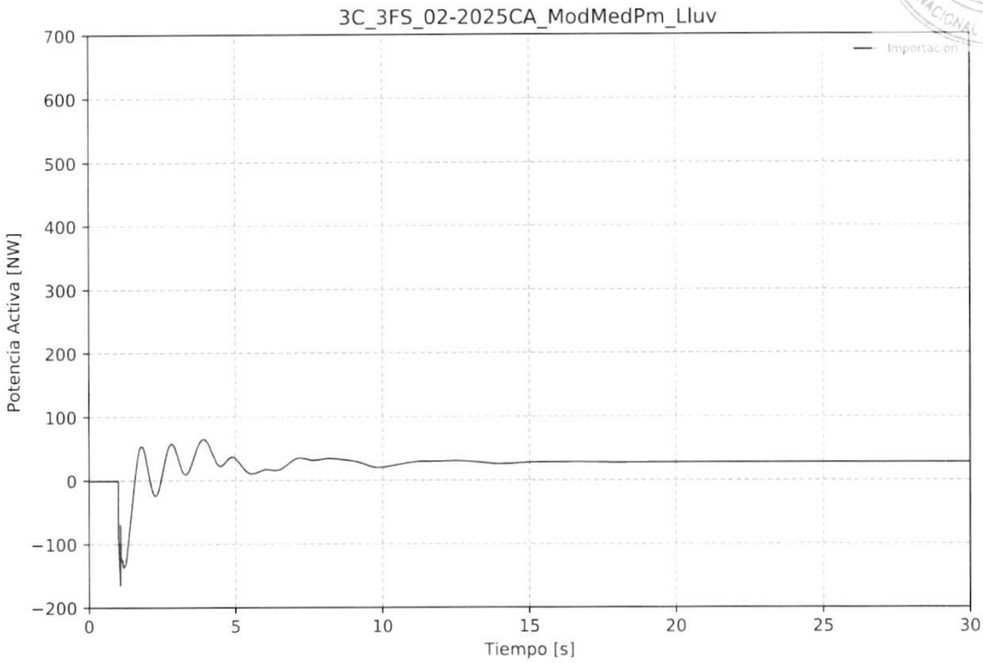

3C_3FS_02-2025CA_ModMedNoct_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
200
150
100
50
0
−50
−100
−150
−200
0
5
10
15
20
25
30
Tiempo [s]

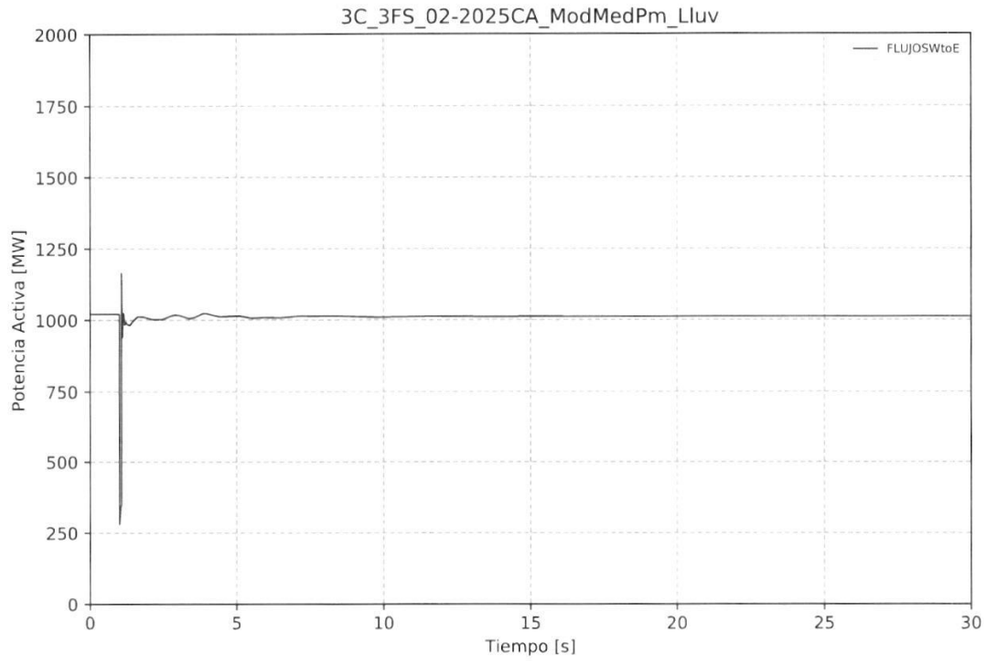
5763


3C_3FS_02-2025CA_ModMedPm_Lluv
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

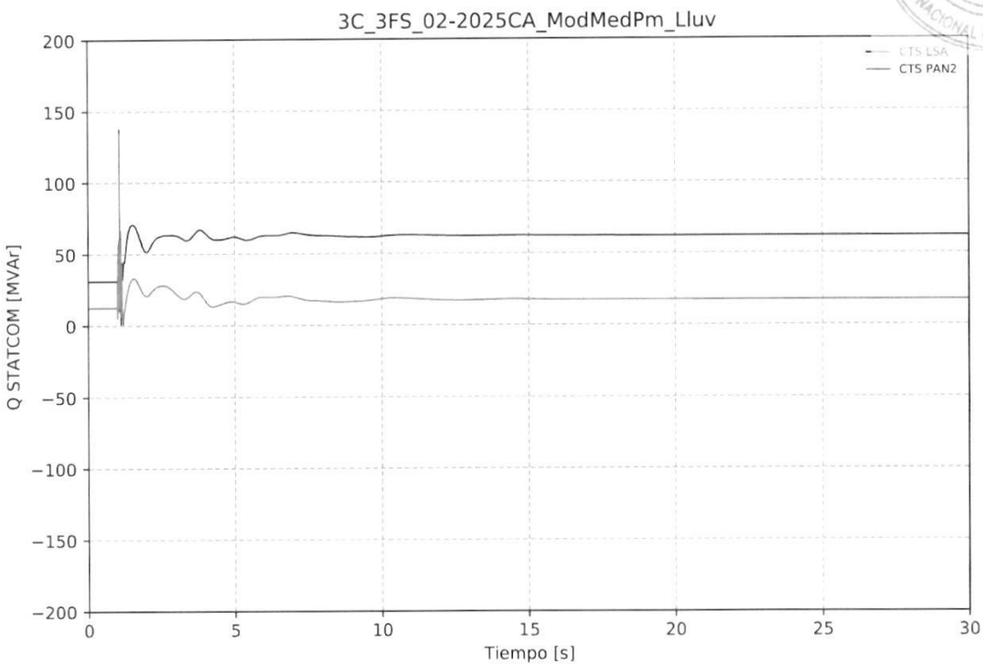

3C_3FS_02-2025CA_ModMedPm_Lluv
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

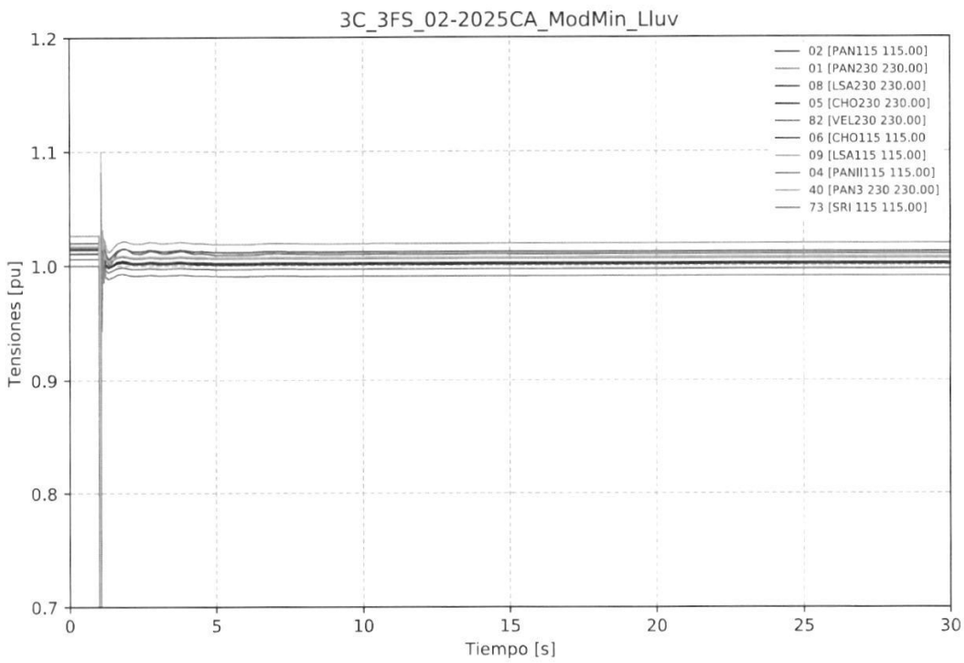
5764


3C_3FS_02-2025CA_ModMedPm_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

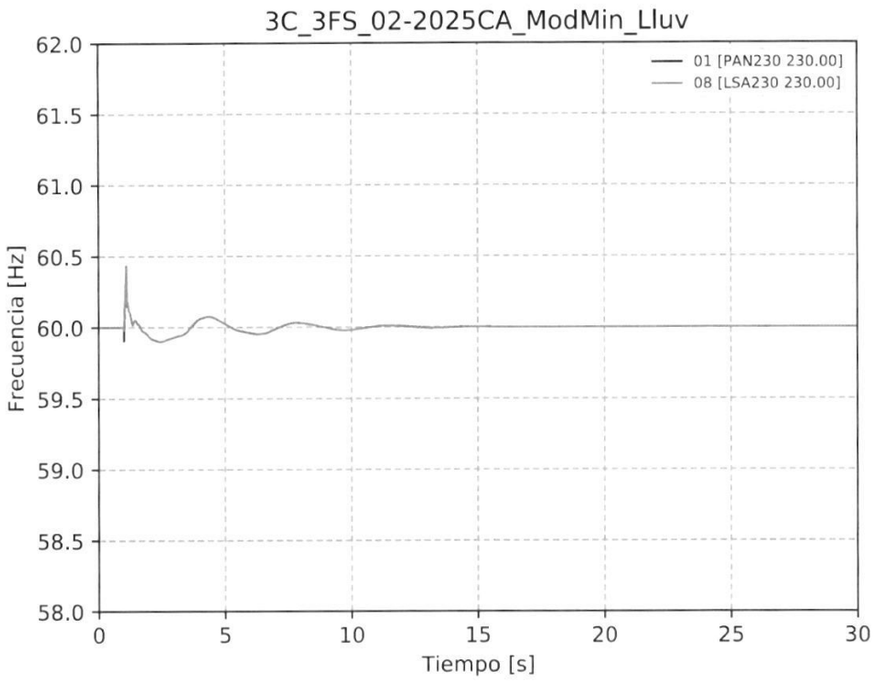

3C_3FS_02-2025CA_ModMedPm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

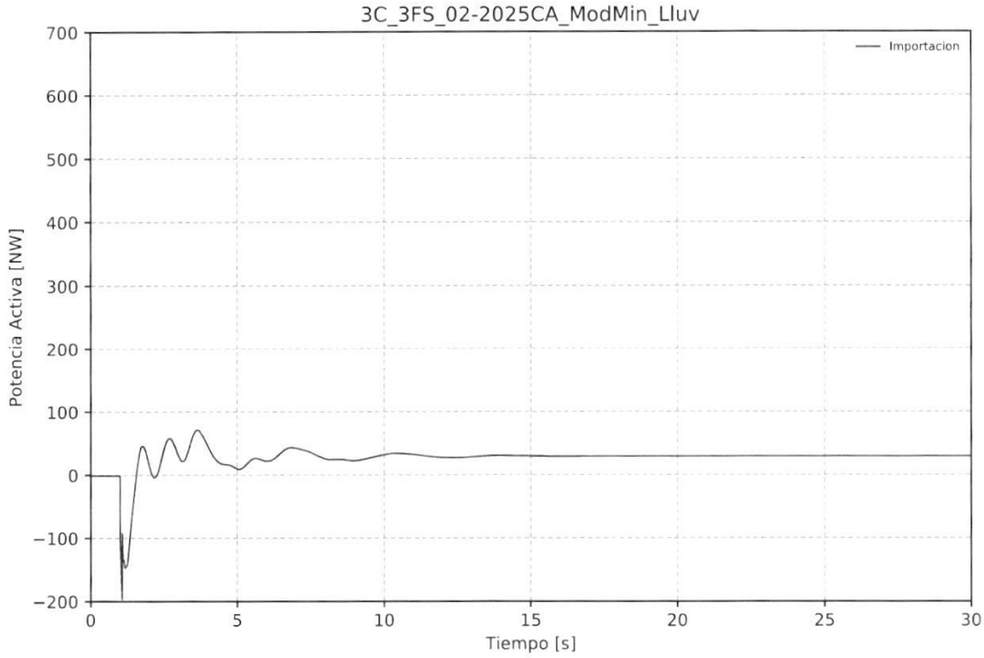
5765


3C_3FS_02-2025CA_ModMedPm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

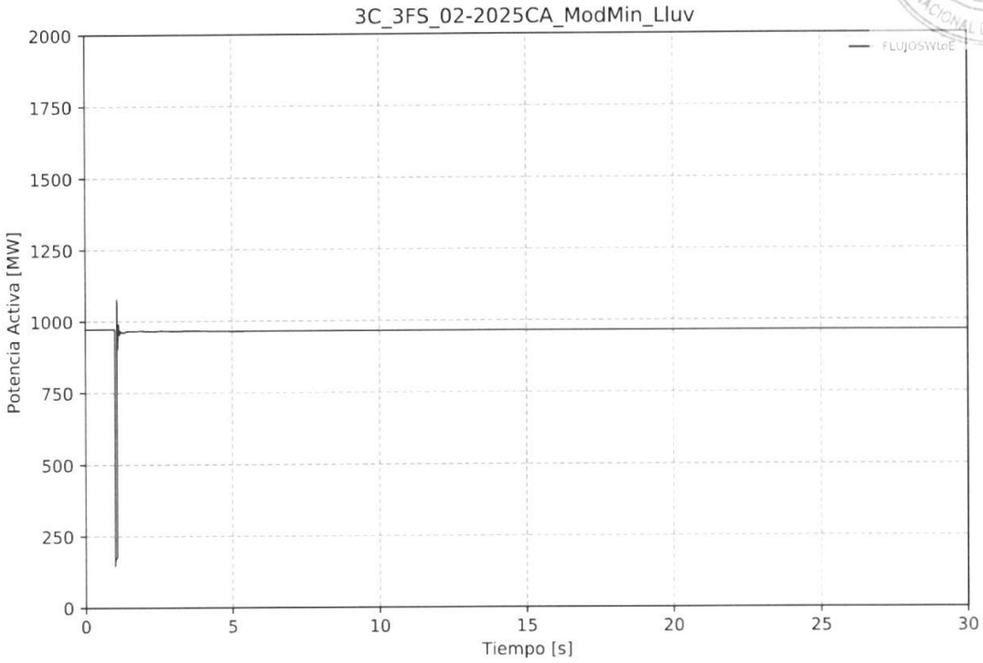

3C_3FS_02-2025CA_ModMin_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

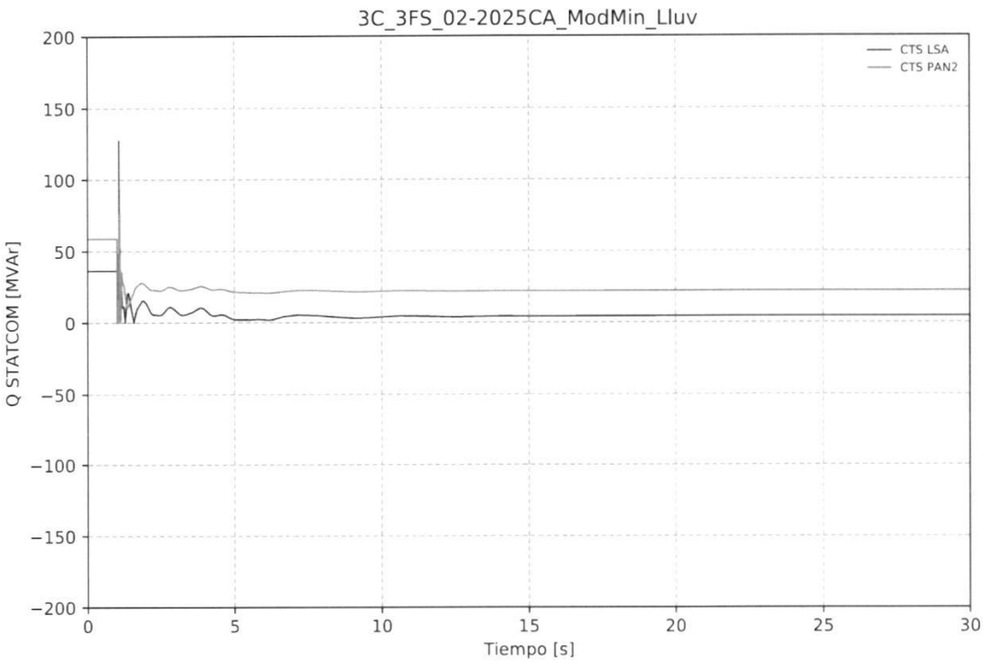
5766


3C_3FS_02-2025CA_ModMin_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

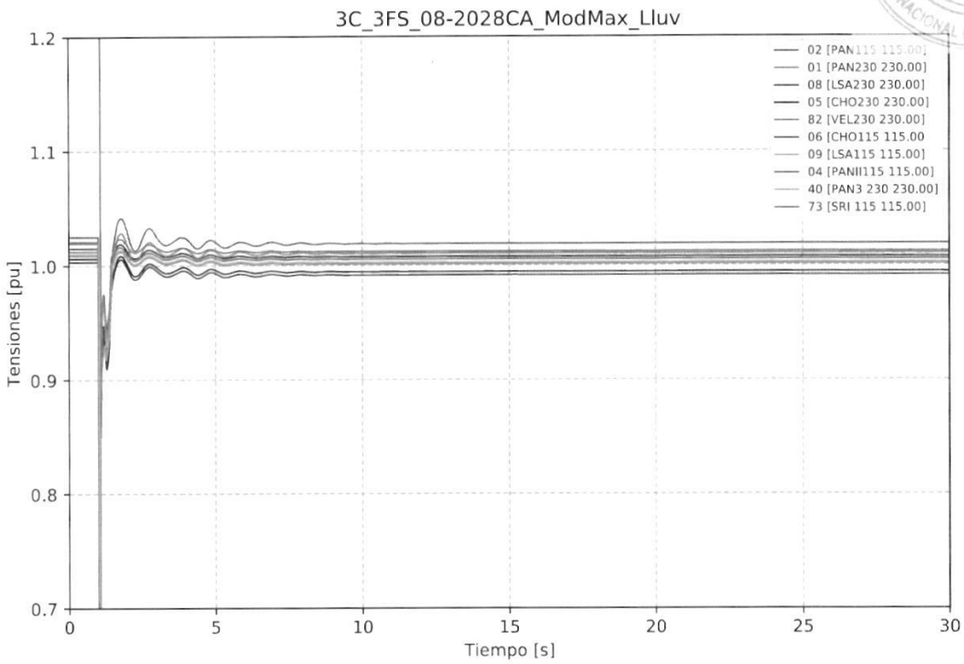

3C_3FS_02-2025CA_ModMin_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

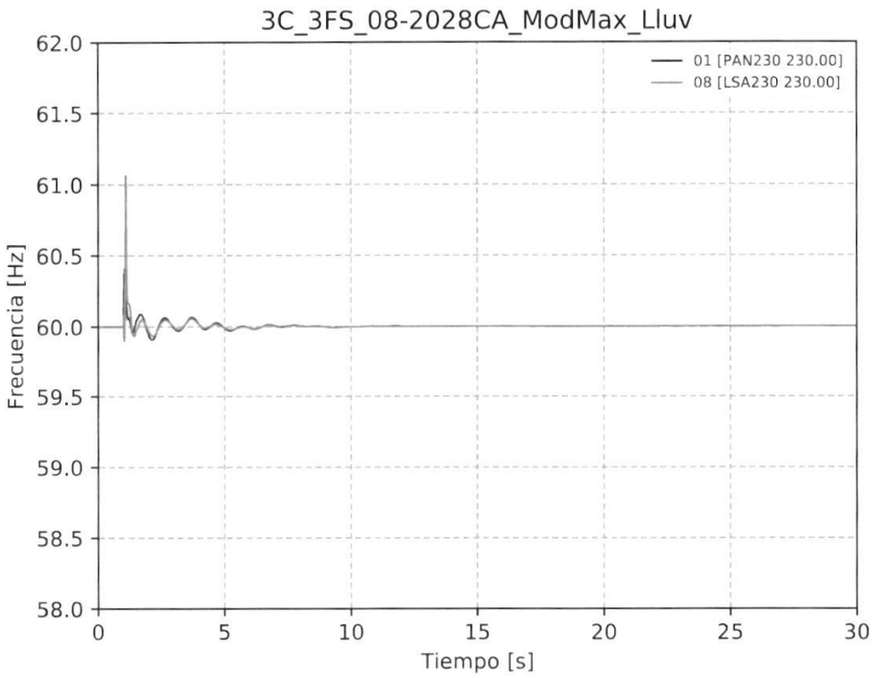
5767


3C_3FS_02-2025CA_ModMin_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

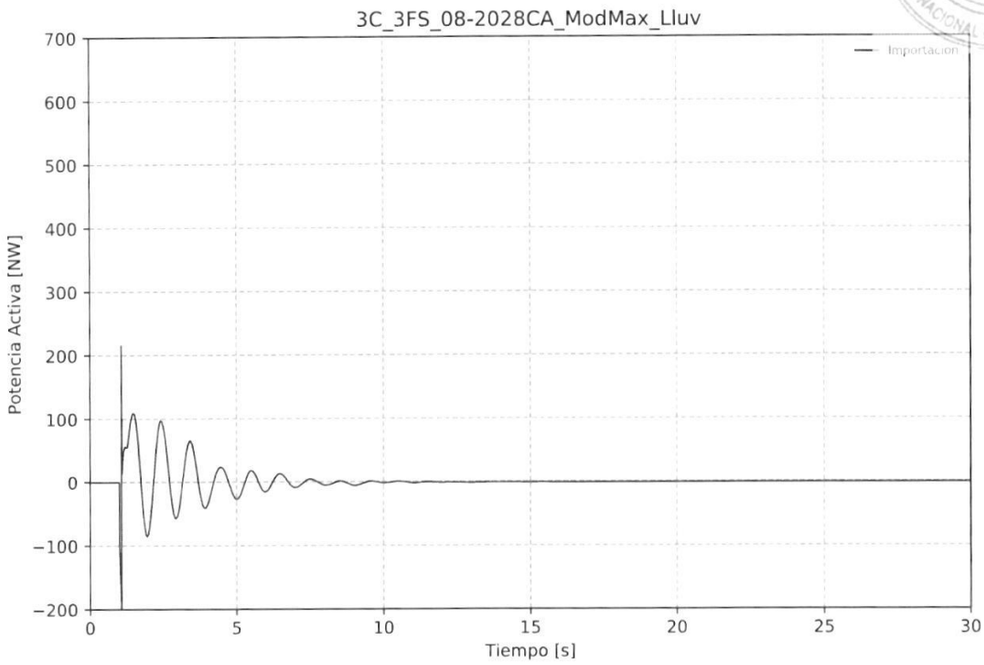

3C_3FS_02-2025CA_ModMin_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

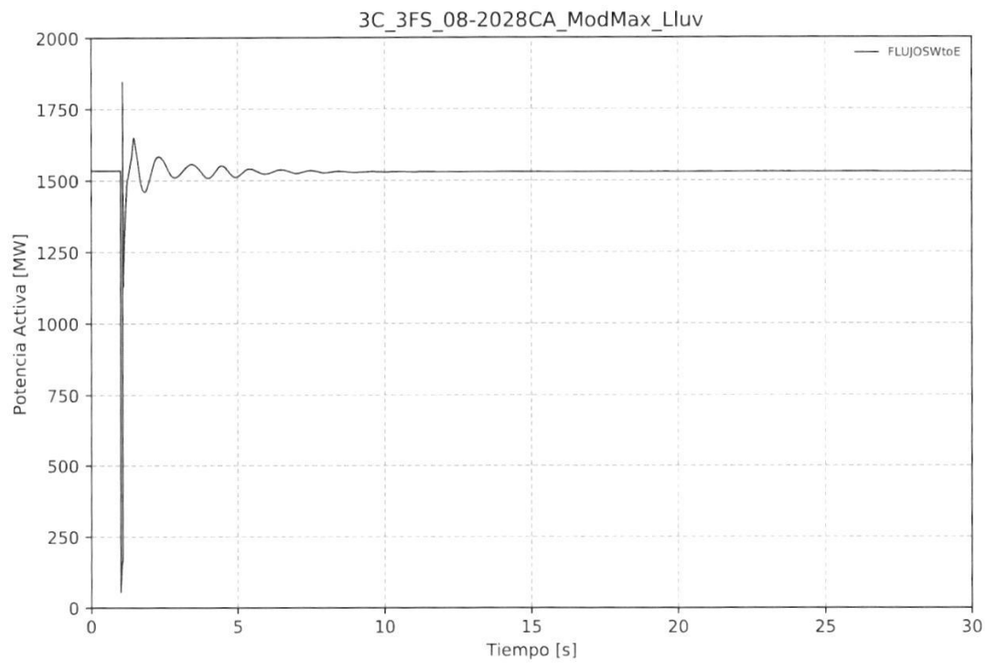
5768


3C_3FS_08-2028CA_ModMax_Lluv
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]


3C_3FS_08-2028CA_ModMax_Lluv
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

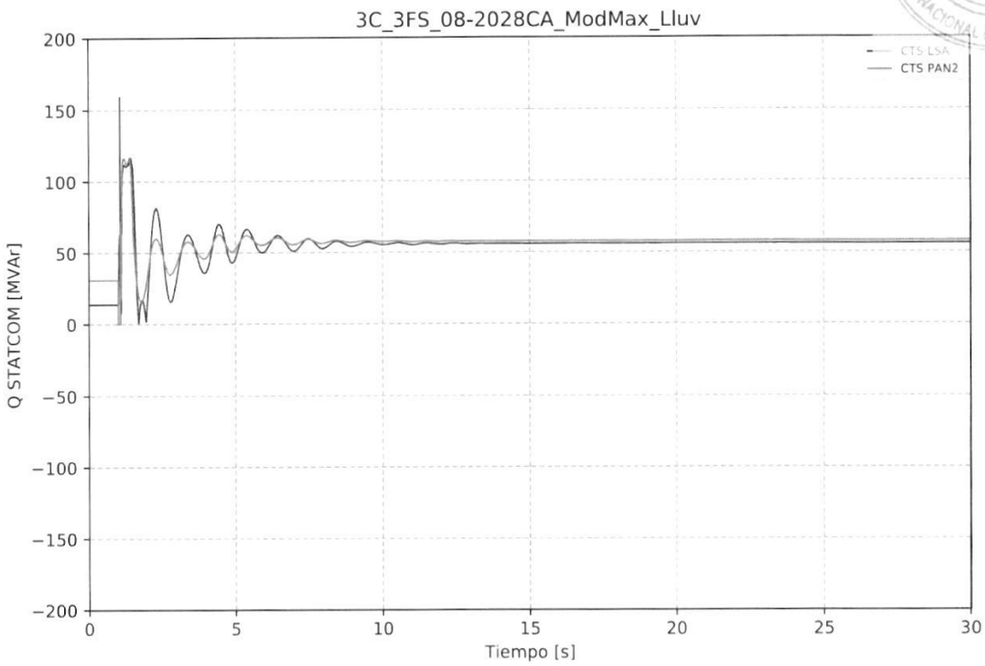
5769

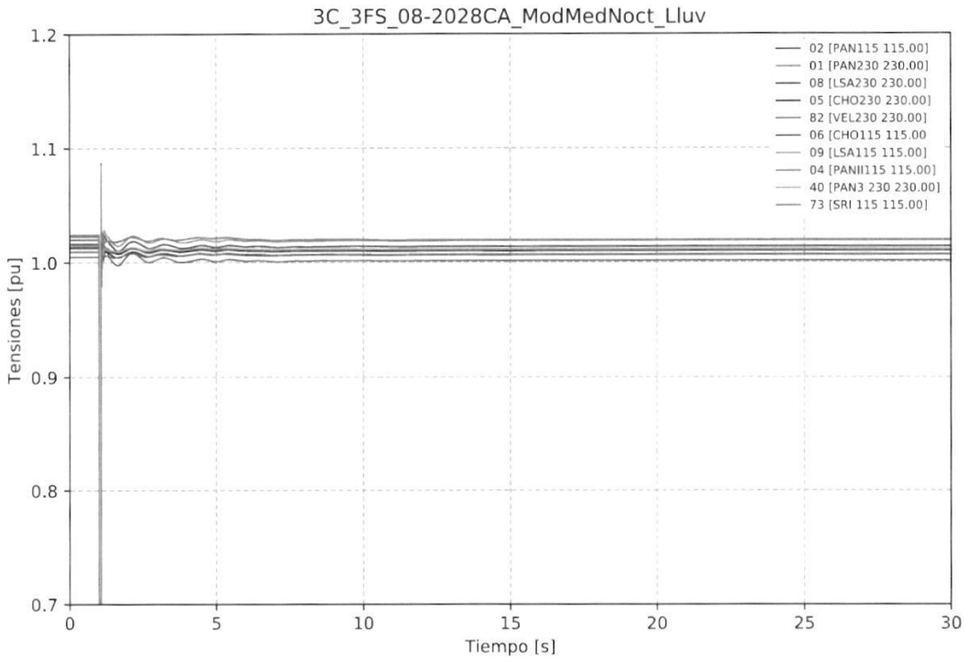

3C_3FS_08-2028CA_ModMax_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30


3C_3FS_08-2028CA_ModMax_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30

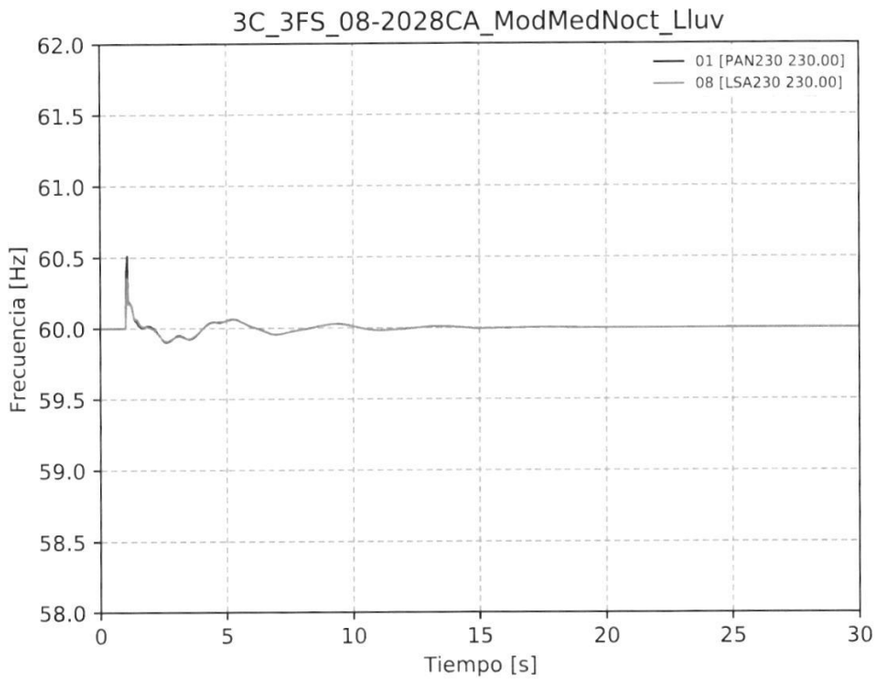
REPÚBLICA DE PANAMÁ
AUTORIDAD NACIONAL DE LOS SERVICIOS PÚBLICOS

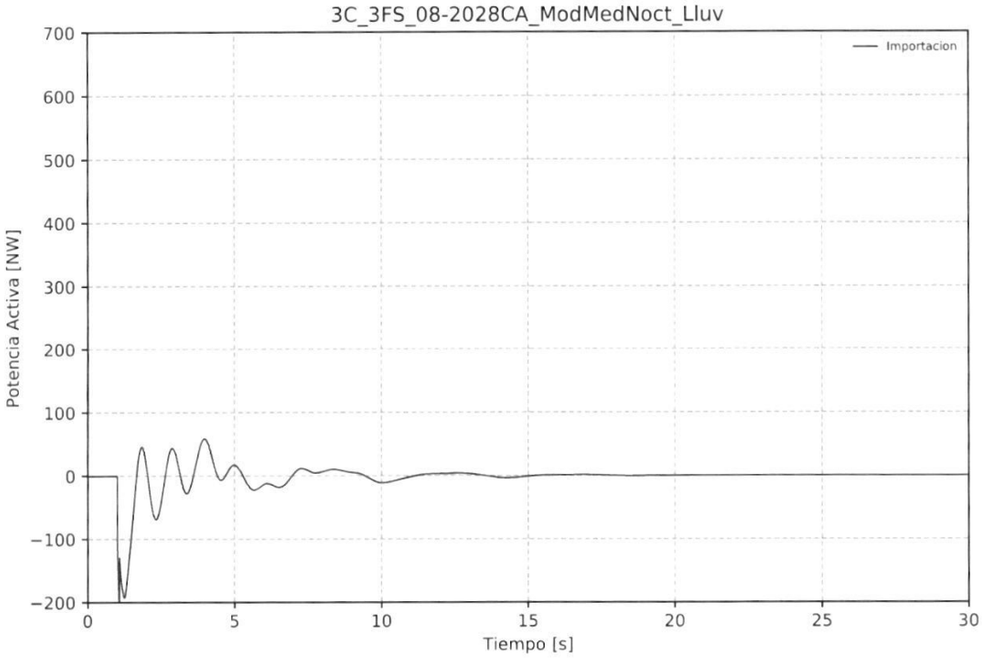
5770



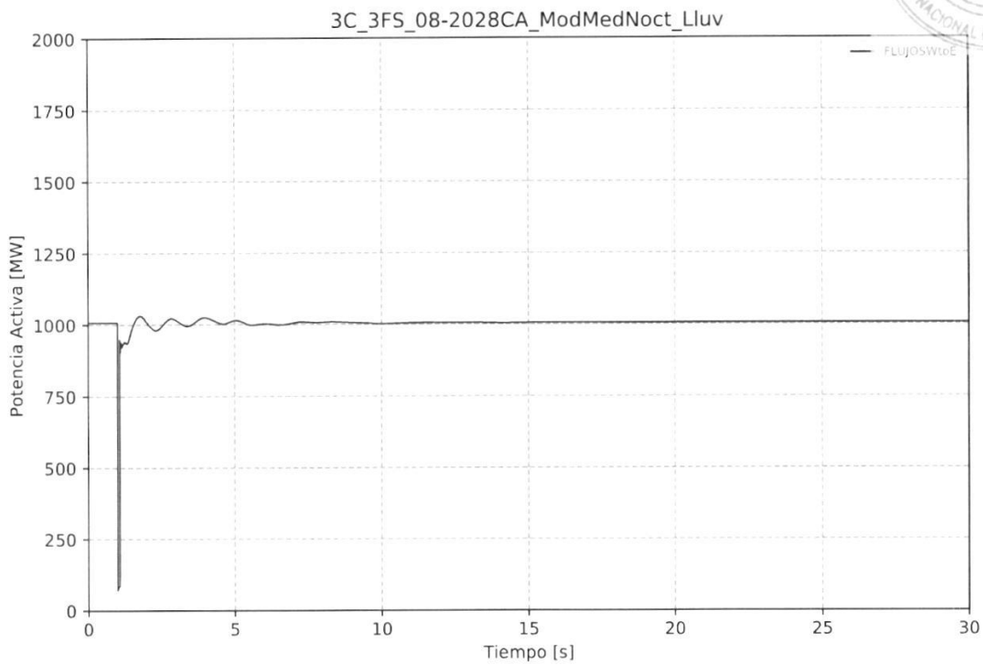


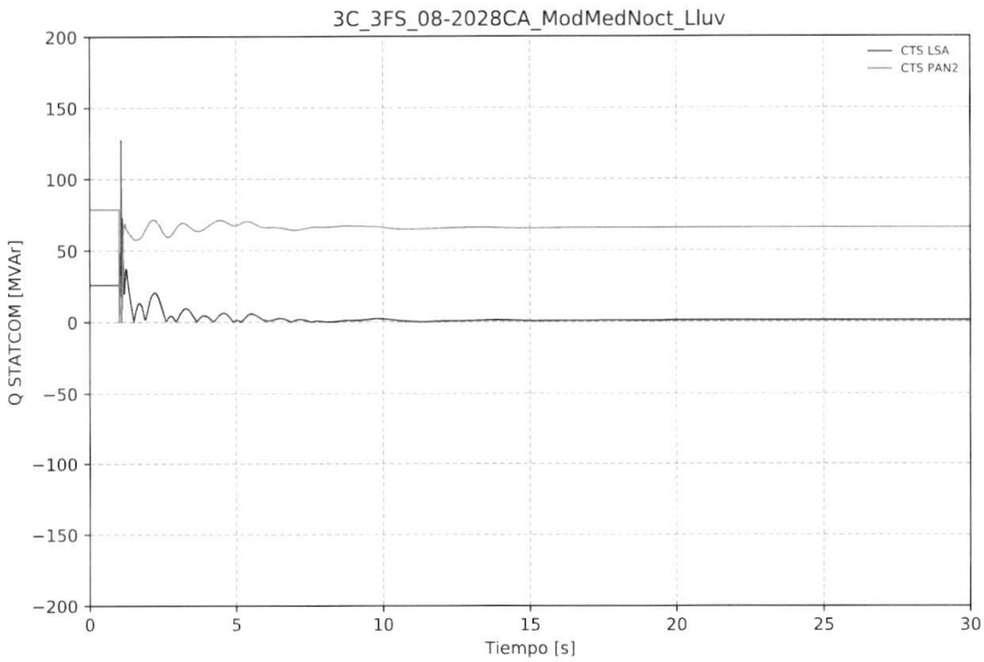
5771


3C_3FS_08-2028CA_ModMedNoct_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

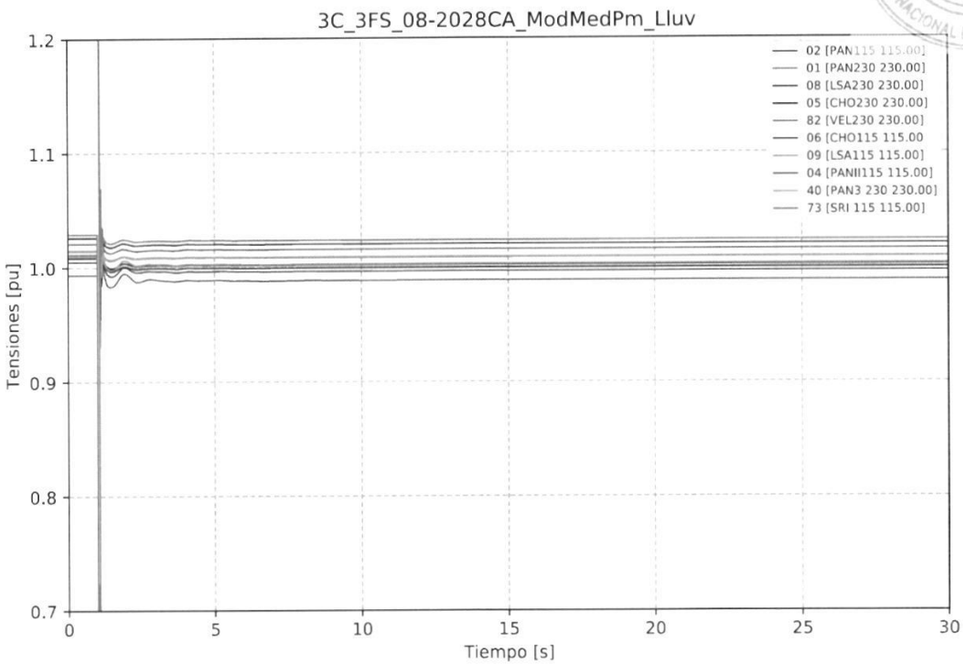

3C_3FS_08-2028CA_ModMedNoct_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

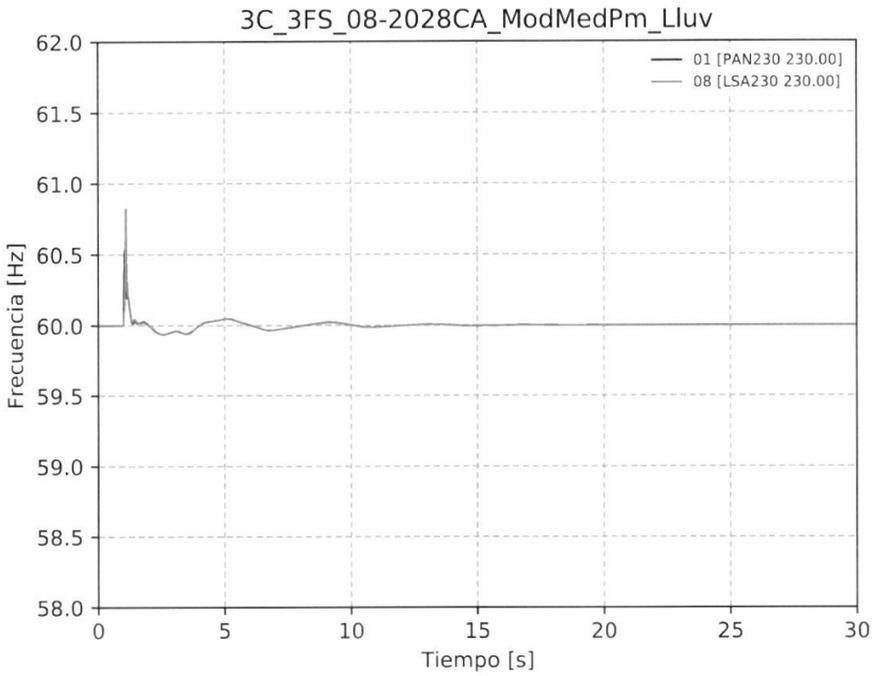
5772


3C_3FS_08-2028CA_ModMedNoct_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

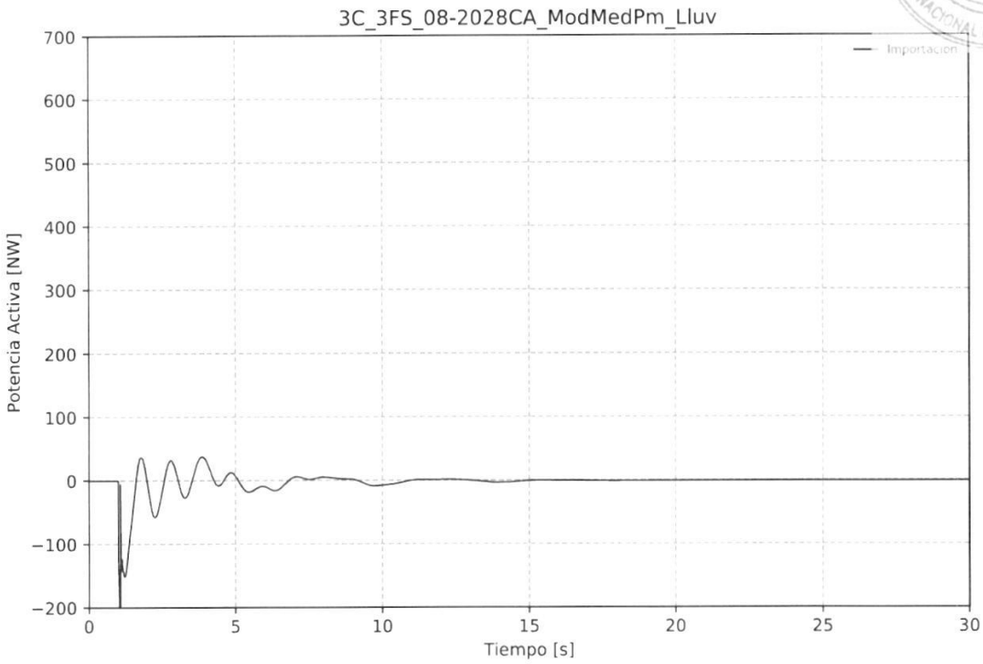

3C_3FS_08-2028CA_ModMedNoct_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

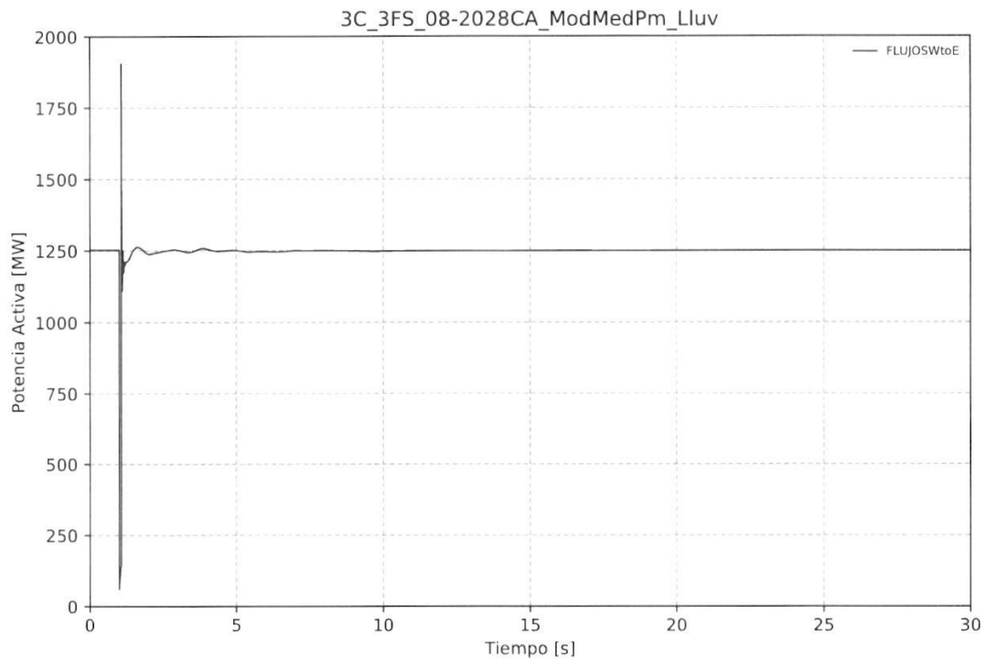
5773


3C_3FS_08-2028CA_ModMedPm_Lluv
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

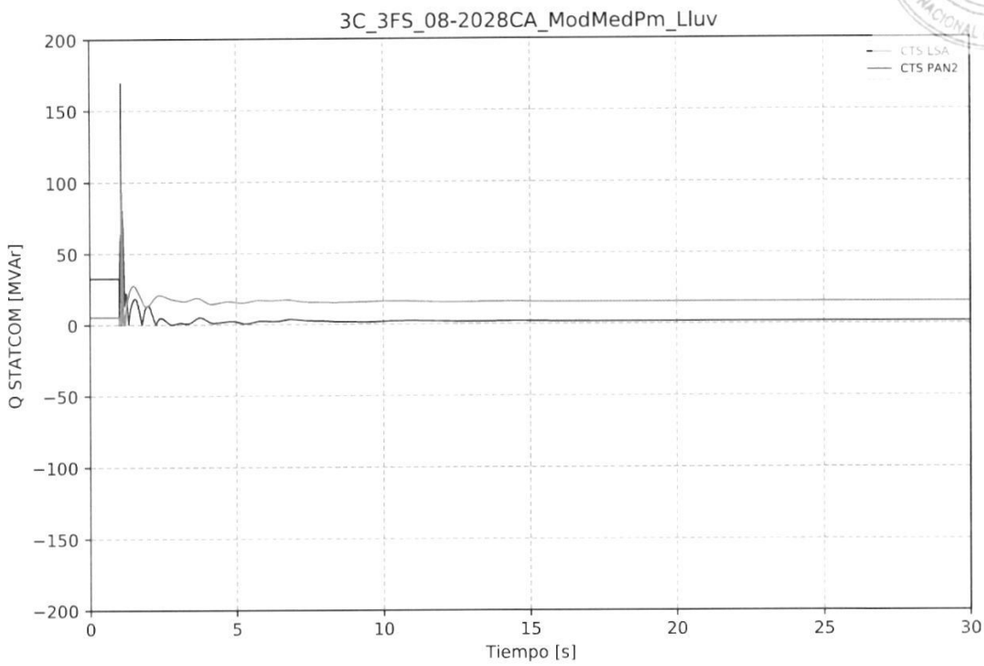

3C_3FS_08-2028CA_ModMedPm_Lluv
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

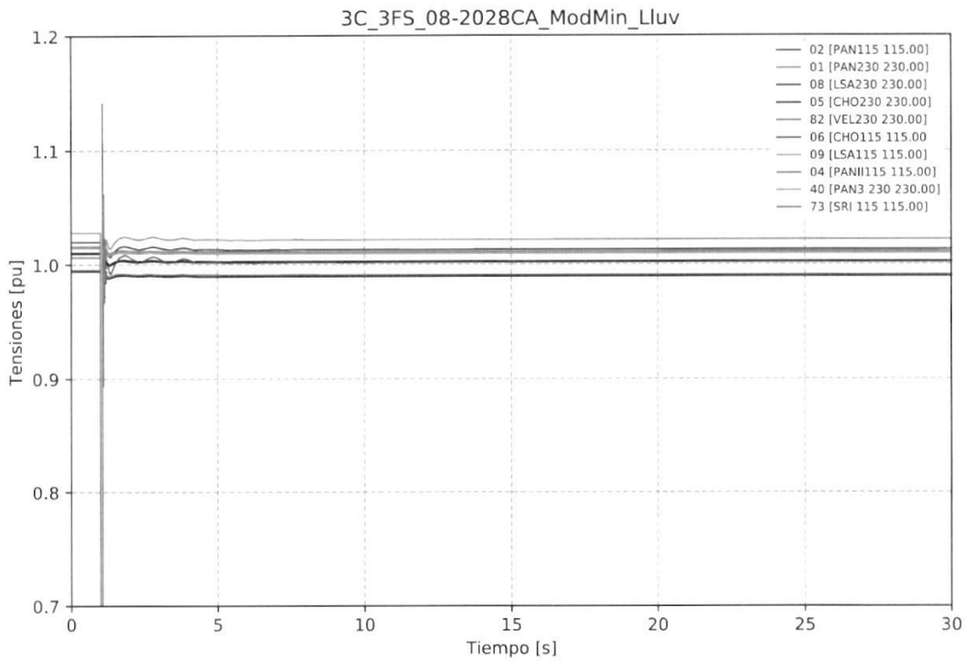
5774


3C_3FS_08-2028CA_ModMedPm_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

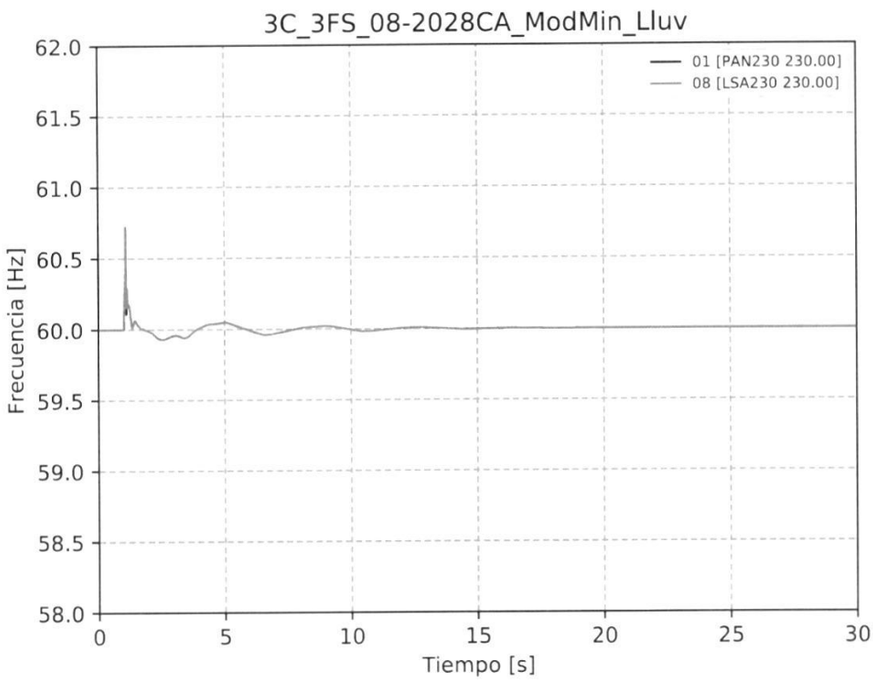

3C_3FS_08-2028CA_ModMedPm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

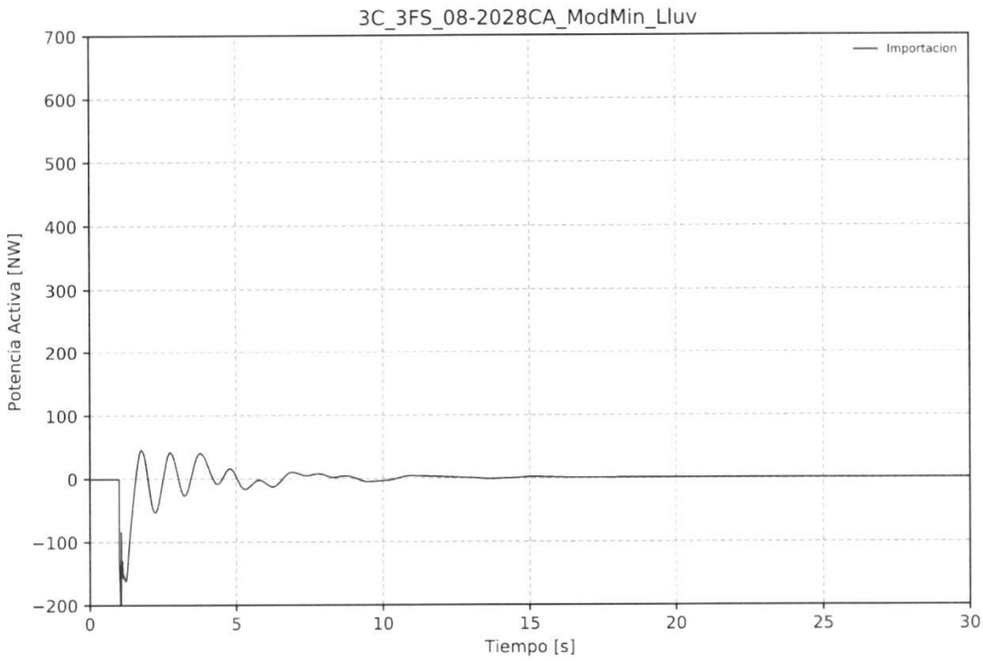
5775


3C_3FS_08-2028CA_ModMedPm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]


3C_3FS_08-2028CA_ModMin_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

5776


3C_3FS_08-2028CA_ModMin_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
62.0
61.5
61.0
60.5
60.0
59.5
59.0
58.5
58.0
0
5
10
15
20
25
30
Tiempo [s]


3C_3FS_08-2028CA_ModMin_Lluv
Importacion
Potencia Activa [NW]
700
600
500
400
300
200
100
0
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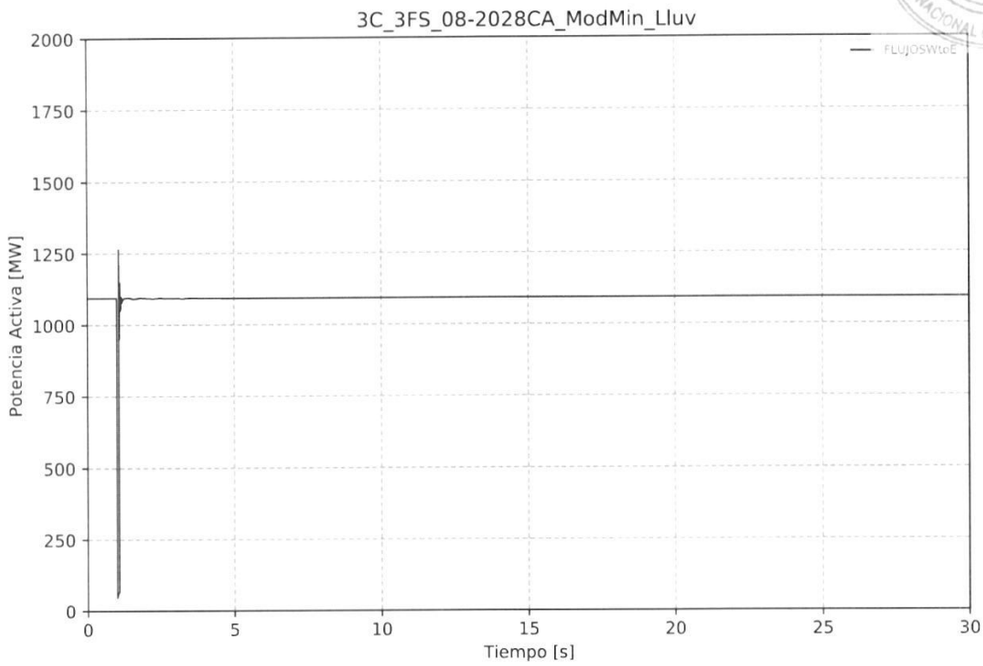
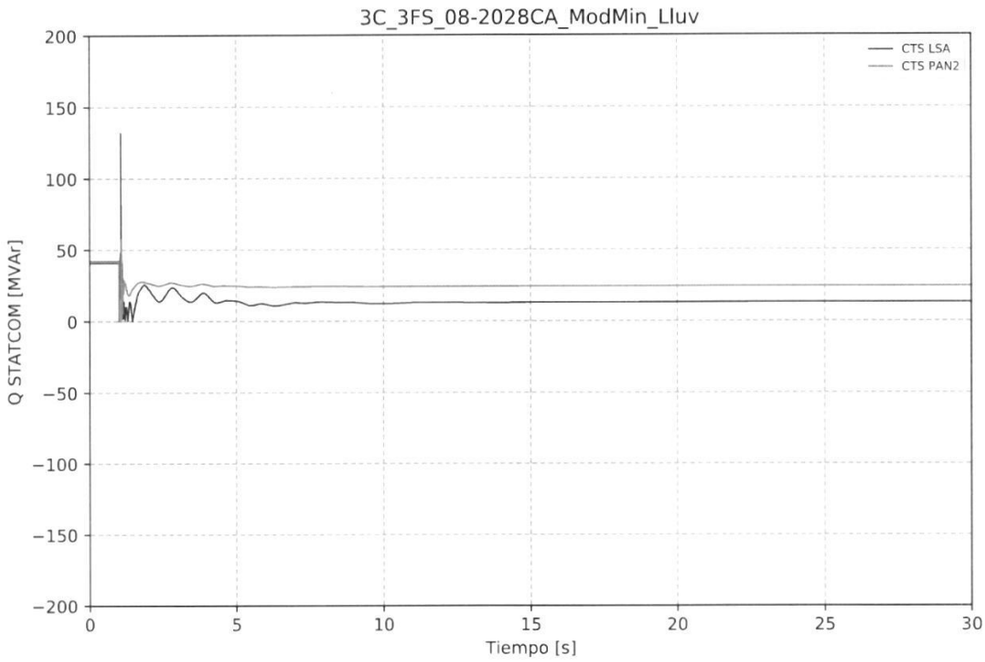
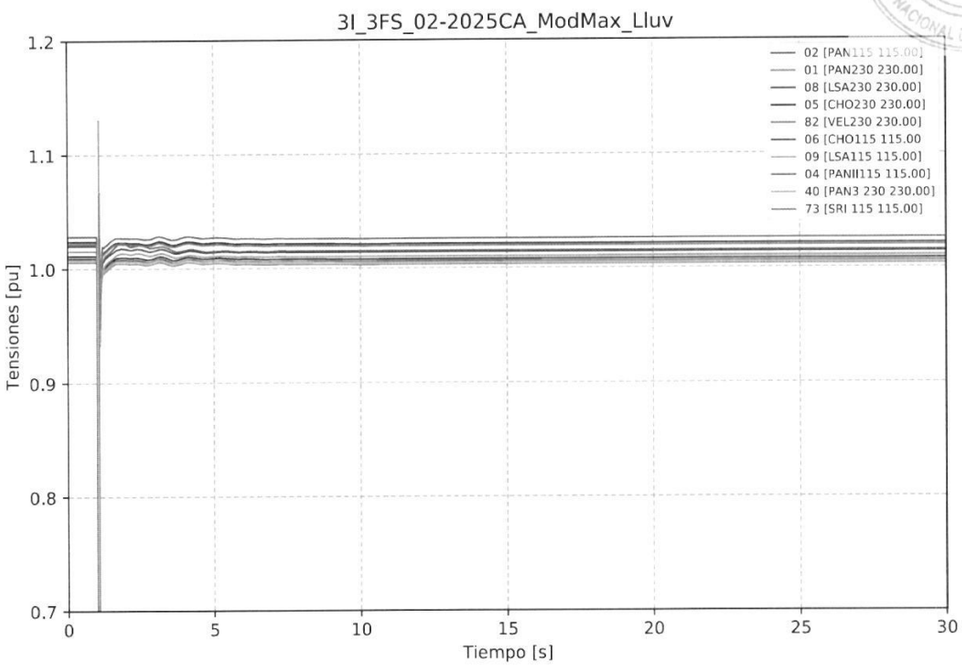
10
15
20
25
30
Tiempo [s]

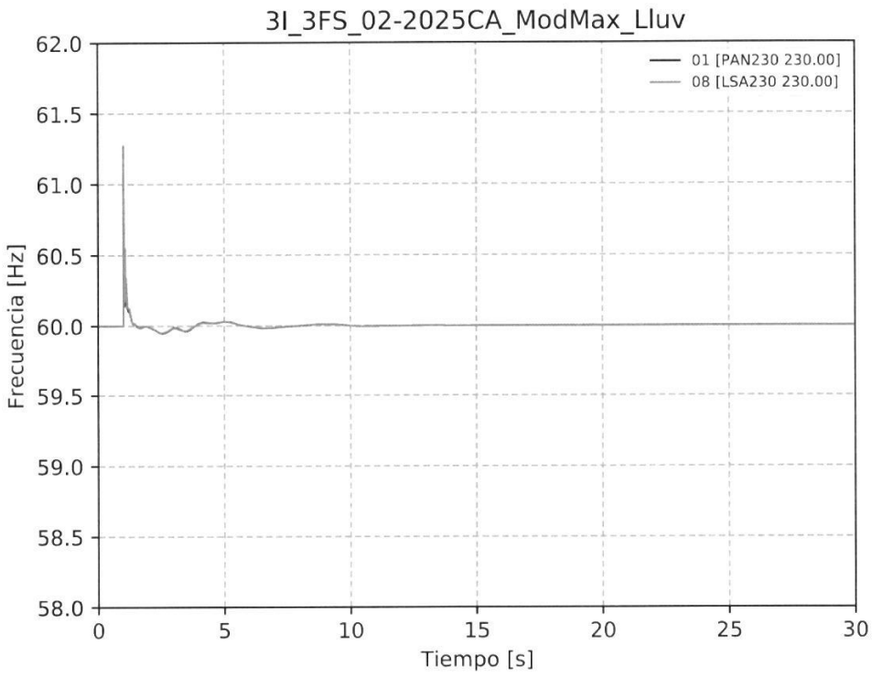
5777


3C_3FS_08-2028CA_ModMin_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

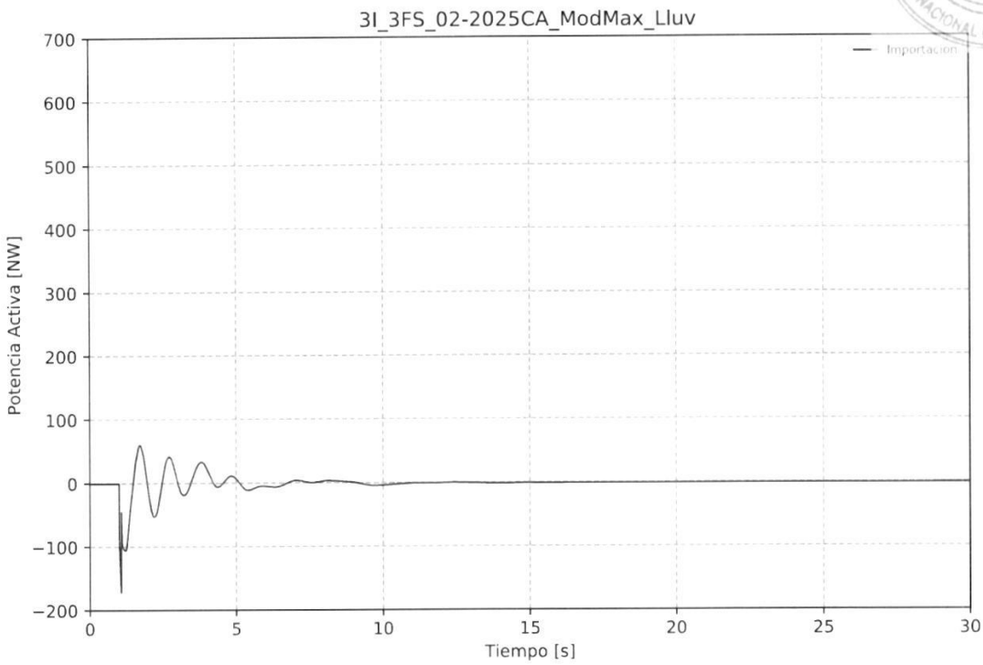

3C_3FS_08-2028CA_ModMin_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

5778


3I_3FS_02-2025CA_ModMax_Lluv
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]


3I_3FS_02-2025CA_ModMax_Lluv
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

5779


3I_3FS_02-2025CA_ModMax_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]
700
600
500
400
300
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−200
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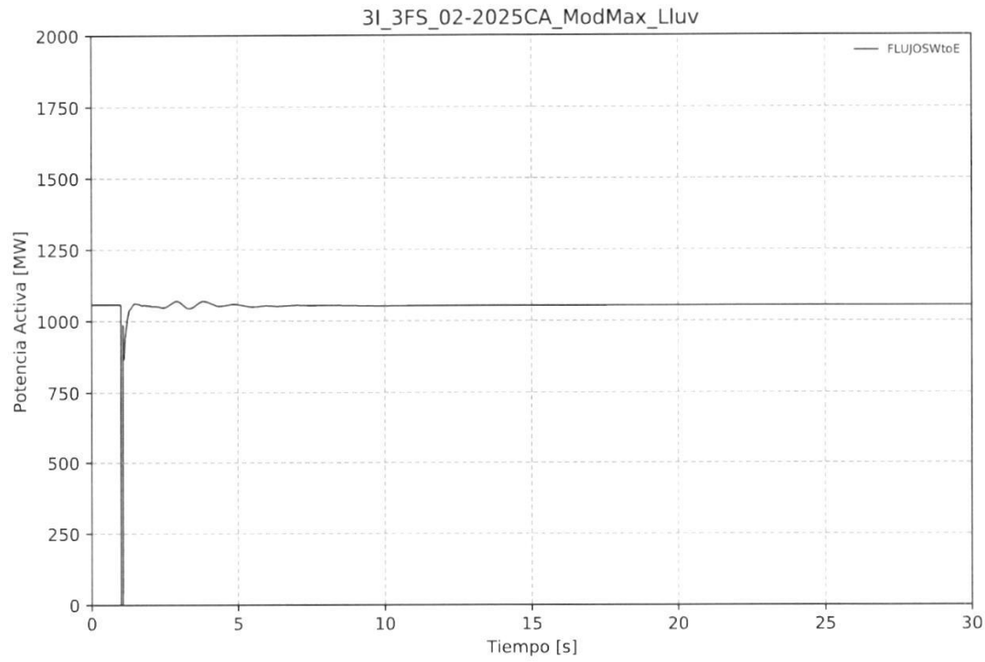
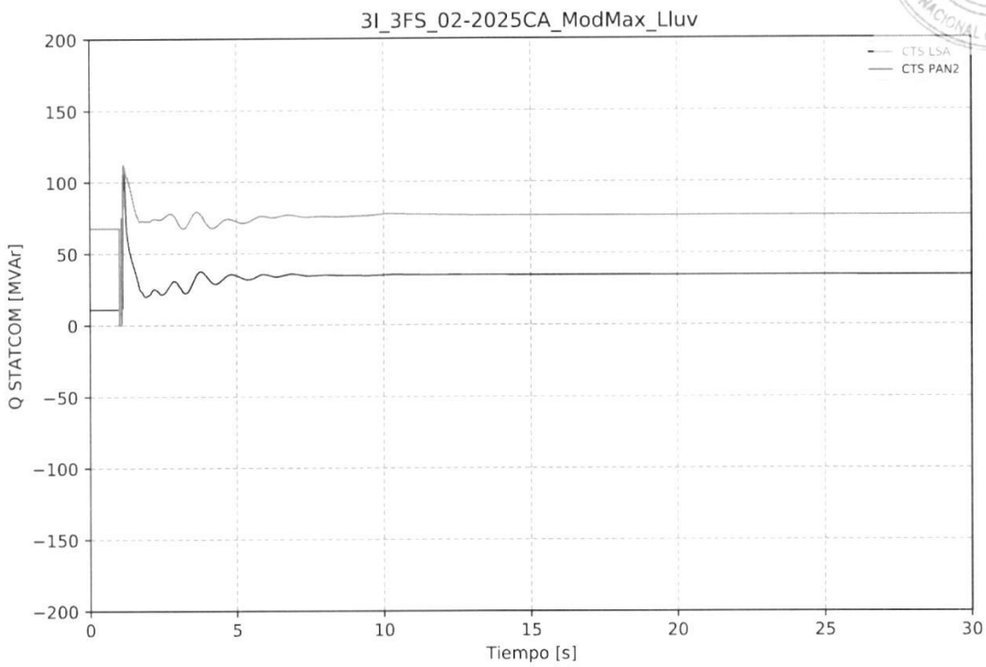
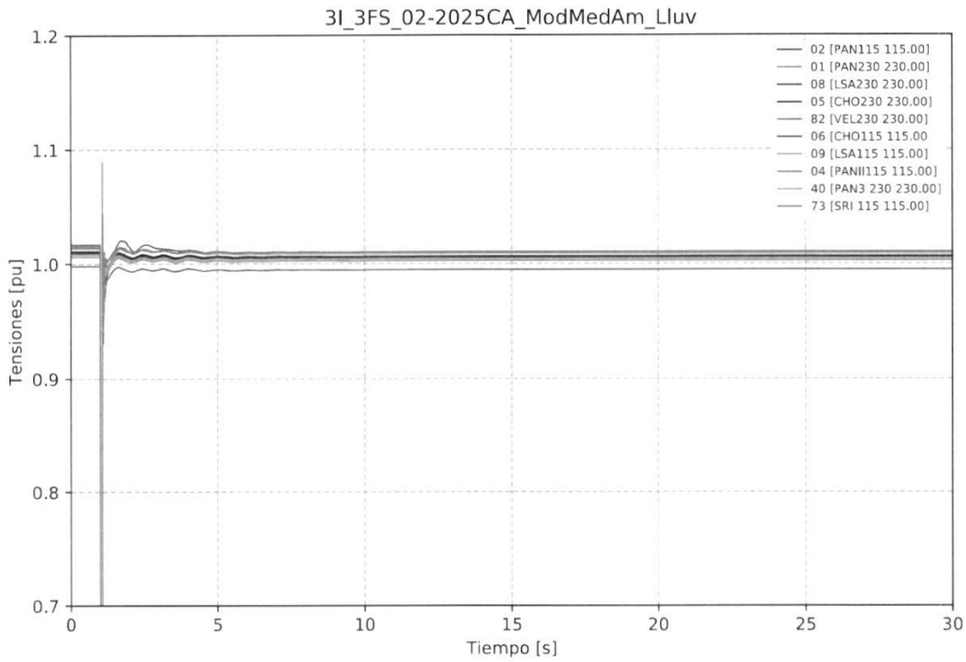
5
10
15
20
25
30

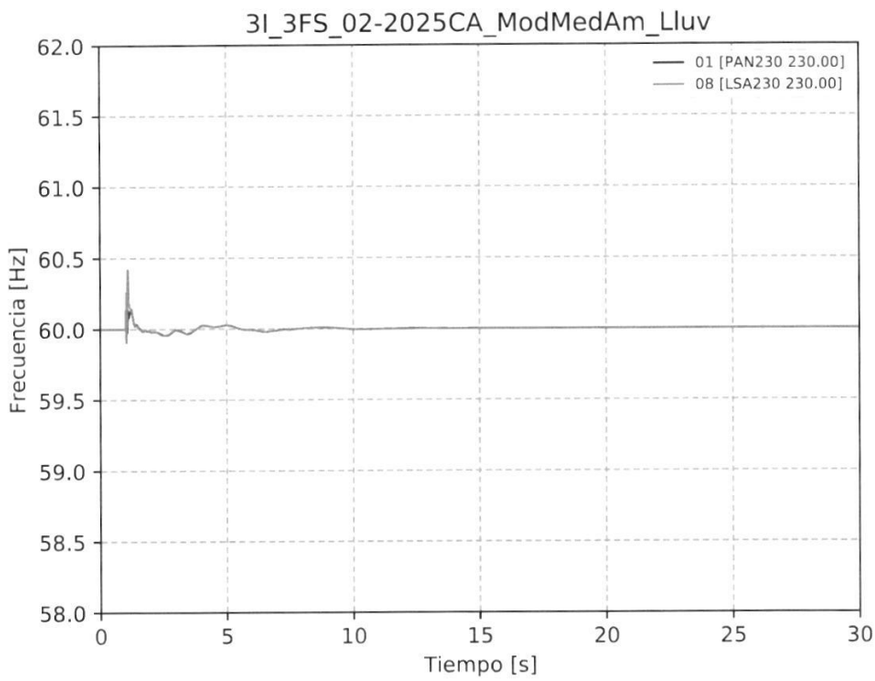

3I_3FS_02-2025CA_ModMax_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30

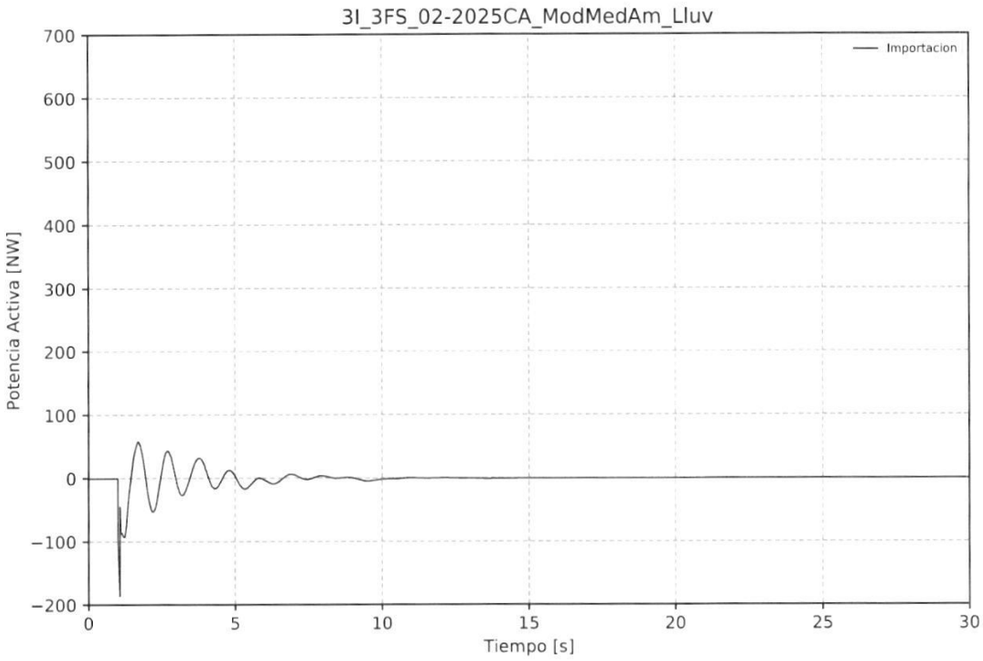
5780


3I_3FS_02-2025CA_ModMax_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

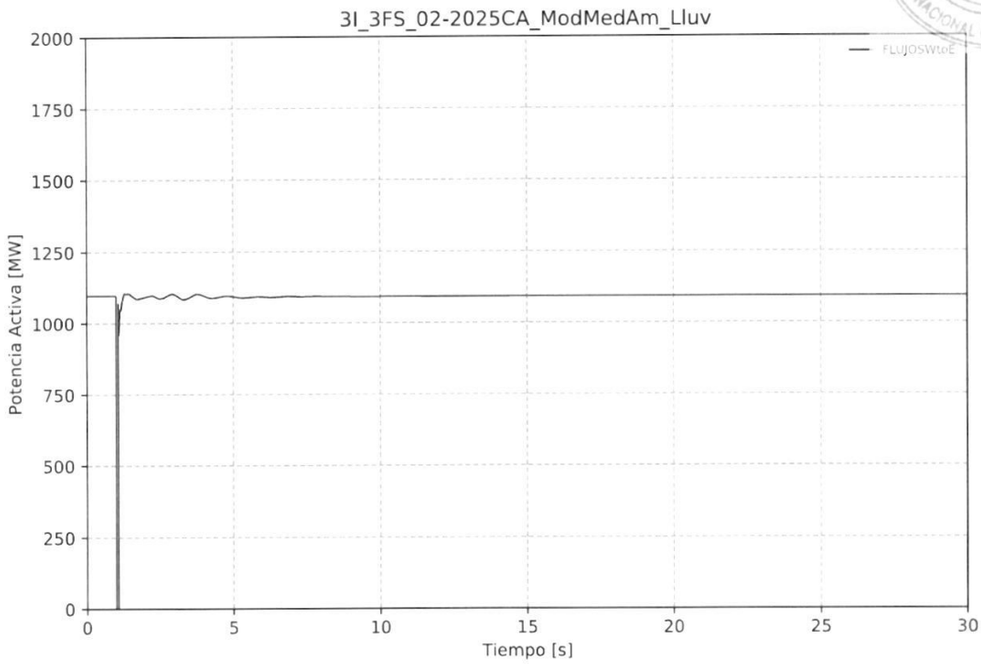

3I_3FS_02-2025CA_ModMedAm_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

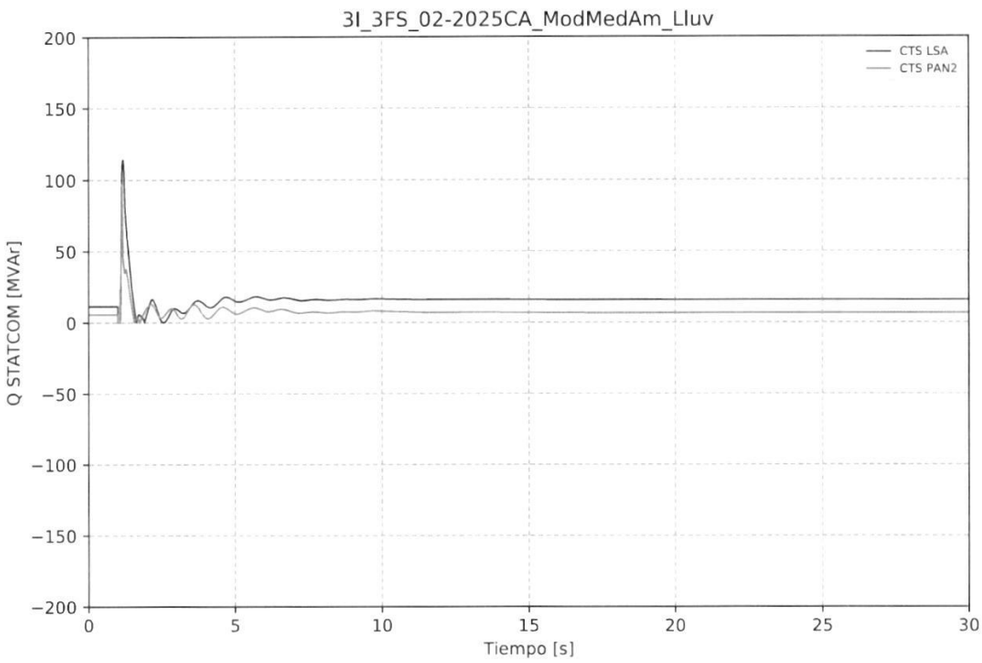
5781


3I_3FS_02-2025CA_ModMedAm_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

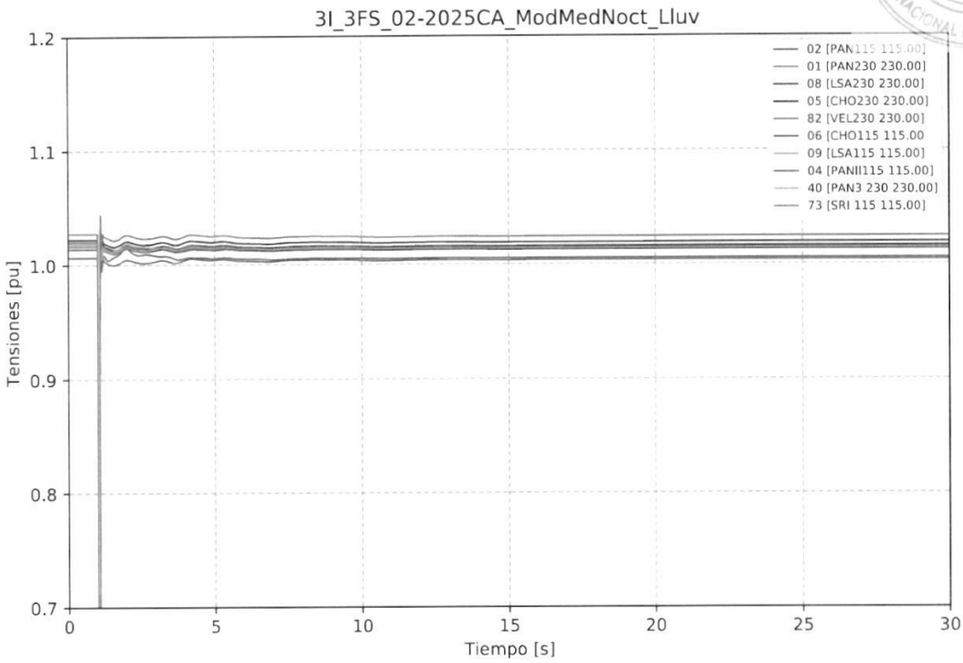

3I_3FS_02-2025CA_ModMedAm_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

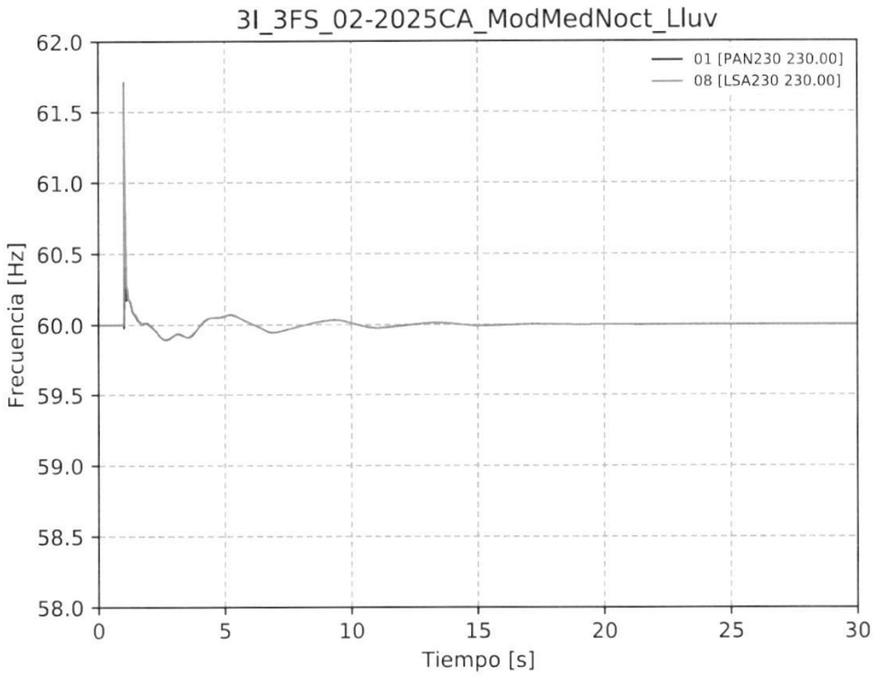
5782


3I_3FS_02-2025CA_ModMedAm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

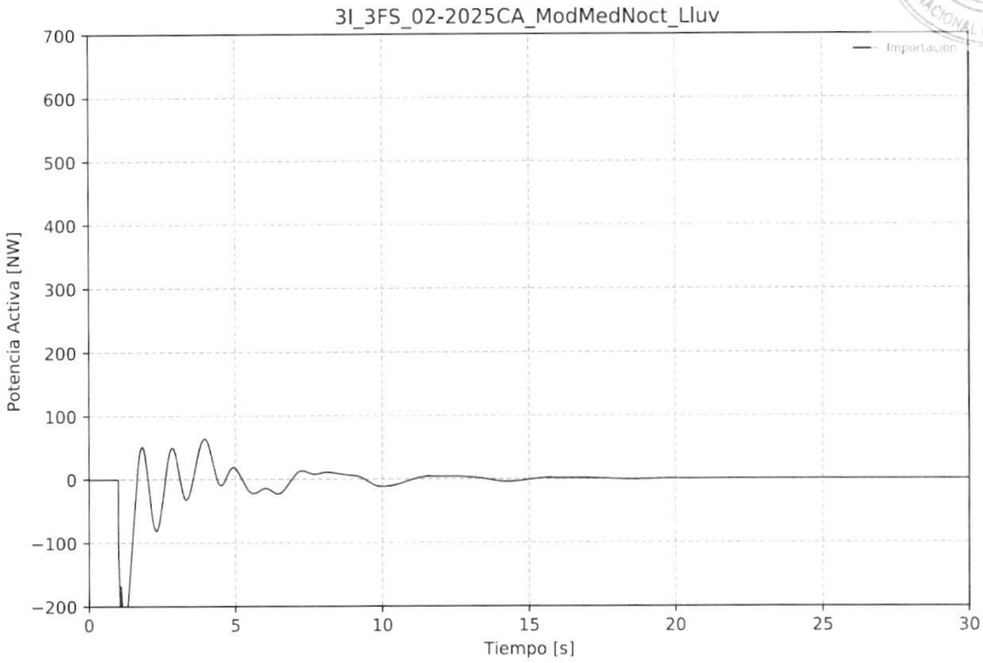

3I_3FS_02-2025CA_ModMedAm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

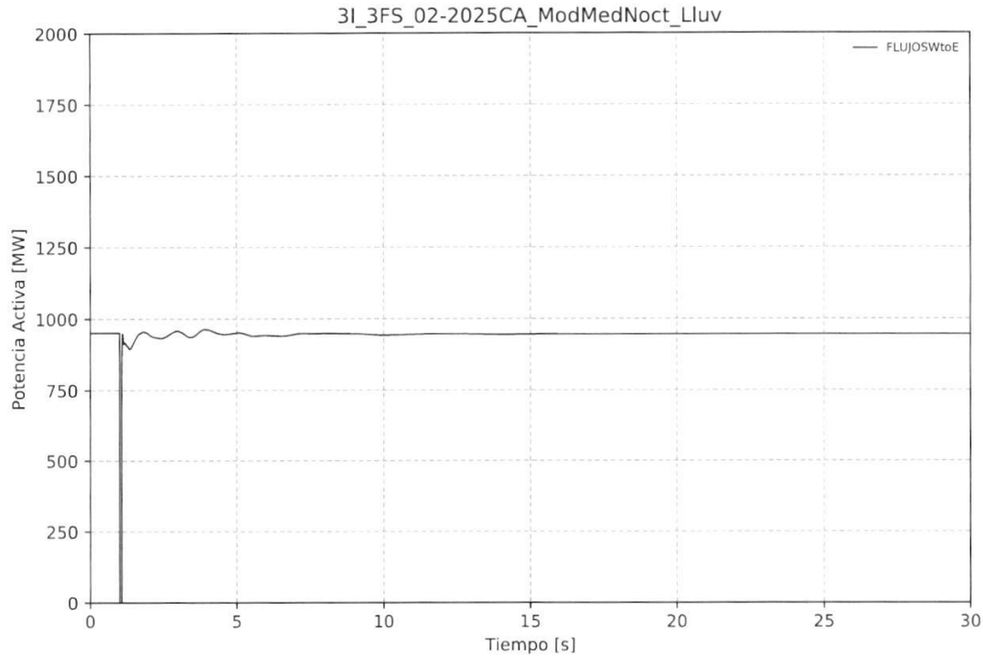
5783


3I_3FS_02-2025CA_ModMedNoct_Lluv
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

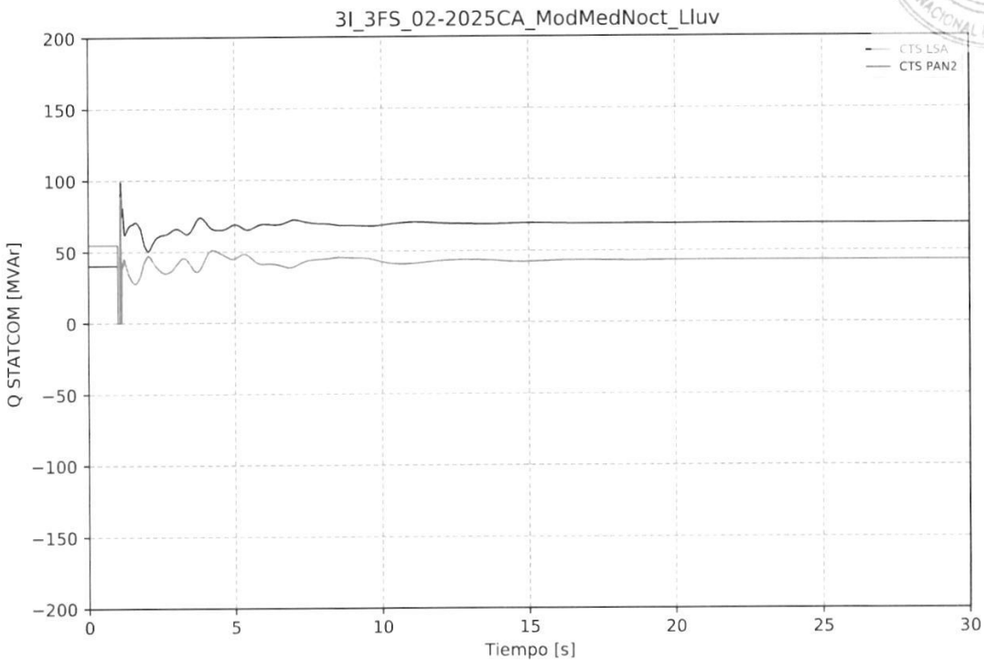

3I_3FS_02-2025CA_ModMedNoct_Lluv
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

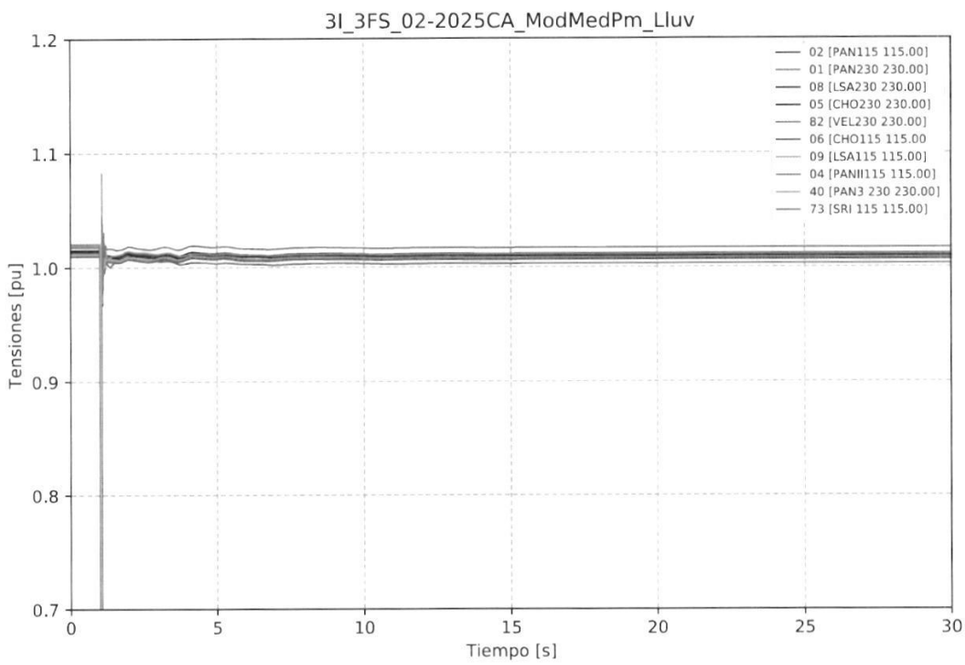
5784


3I_3FS_02-2025CA_ModMedNoct_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

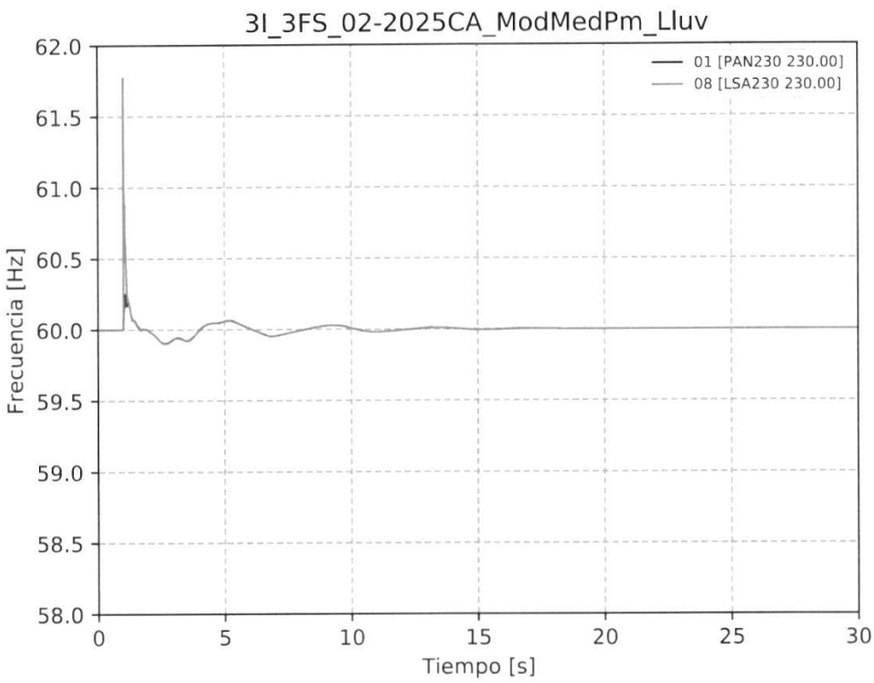

3I_3FS_02-2025CA_ModMedNoct_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

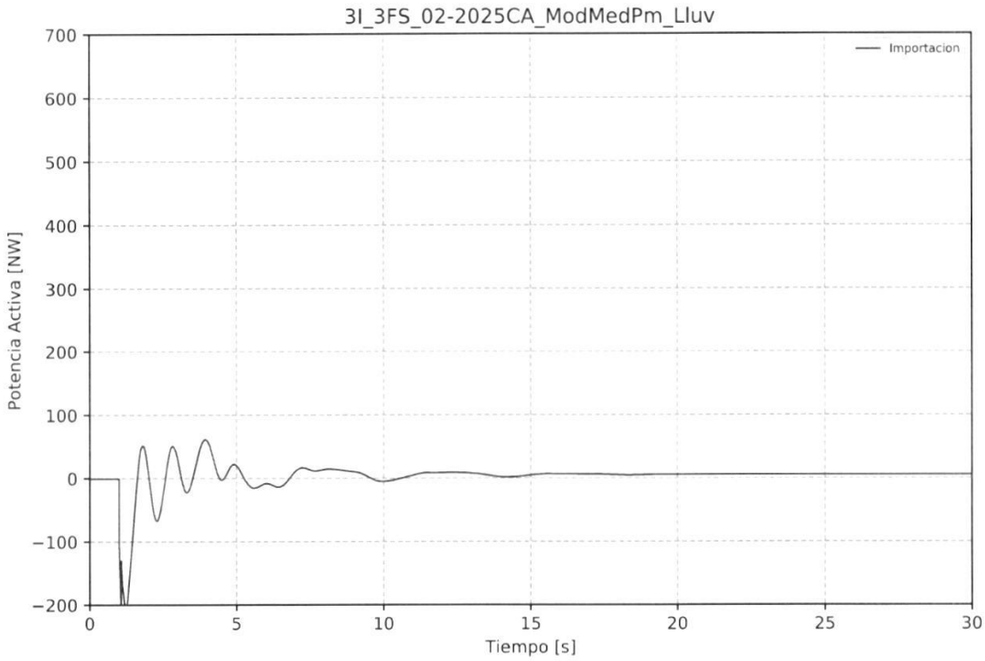
5785


3I_3FS_02-2025CA_ModMedNoct_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

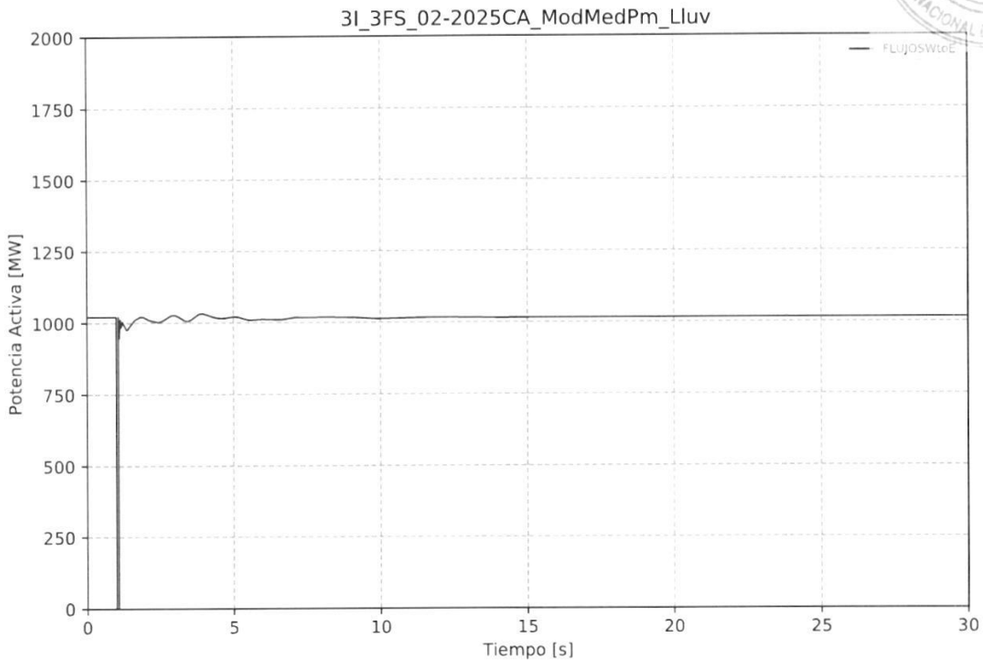

3I_3FS_02-2025CA_ModMedPm_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

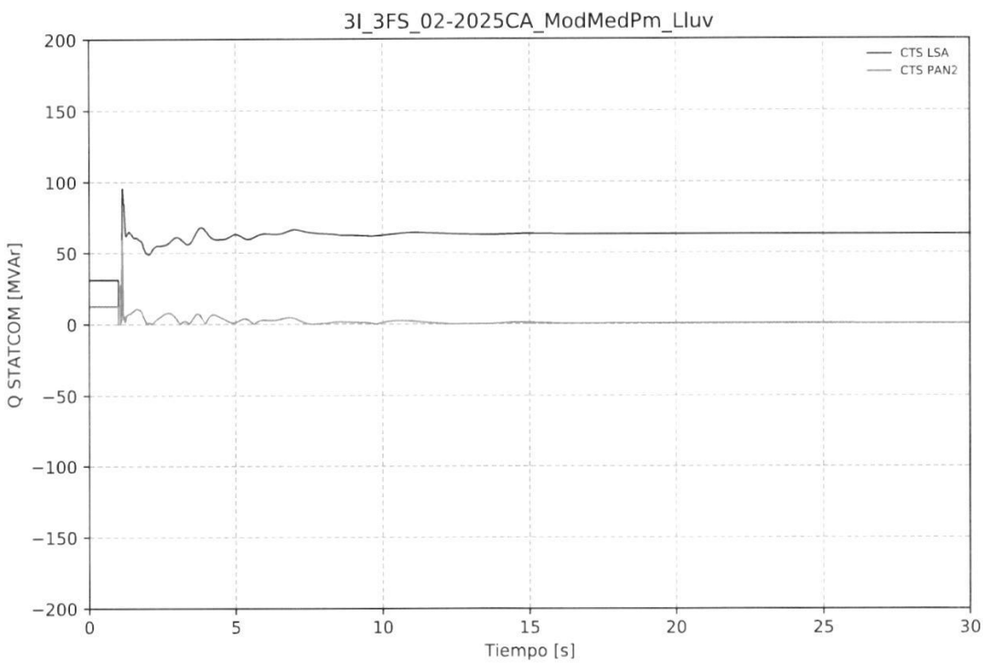
5786


3I_3FS_02-2025CA_ModMedPm_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
62.0
61.5
61.0
60.5
60.0
59.5
59.0
58.5
58.0
0
5
10
15
20
25
30
Tiempo [s]

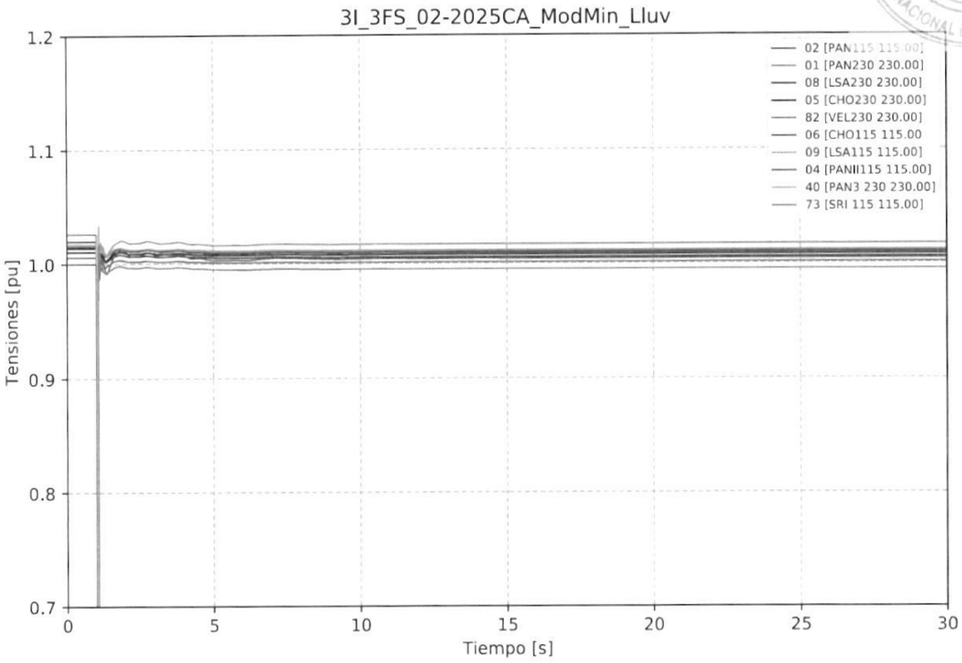

3I_3FS_02-2025CA_ModMedPm_Lluv
Importacion
Potencia Activa [NW]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30
Tiempo [s]

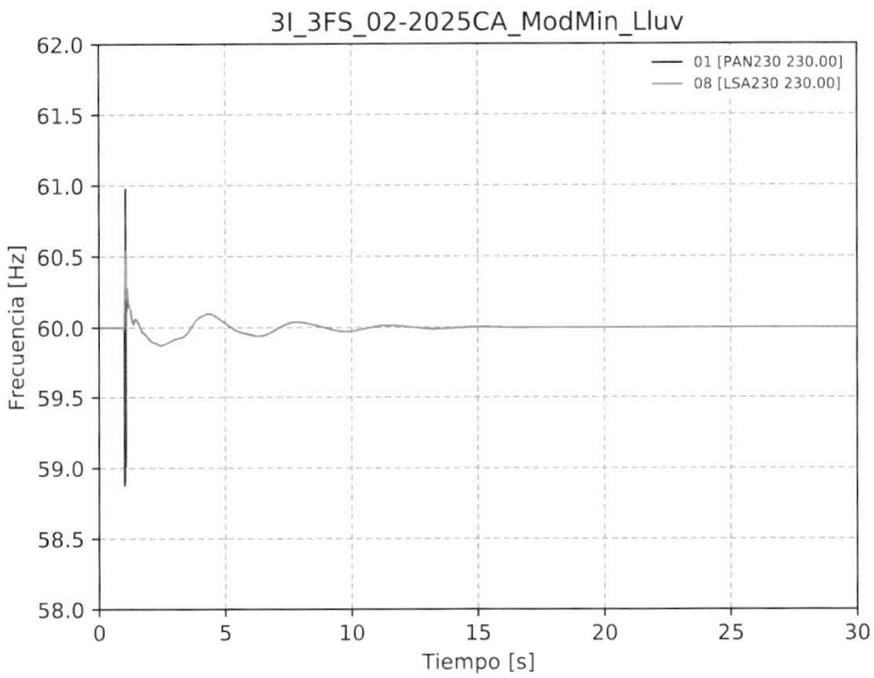
5787


3I_3FS_02-2025CA_ModMedPm_Lluv
FLUJOSWIDE
Potencia Activa [MW]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30
Tiempo [s]

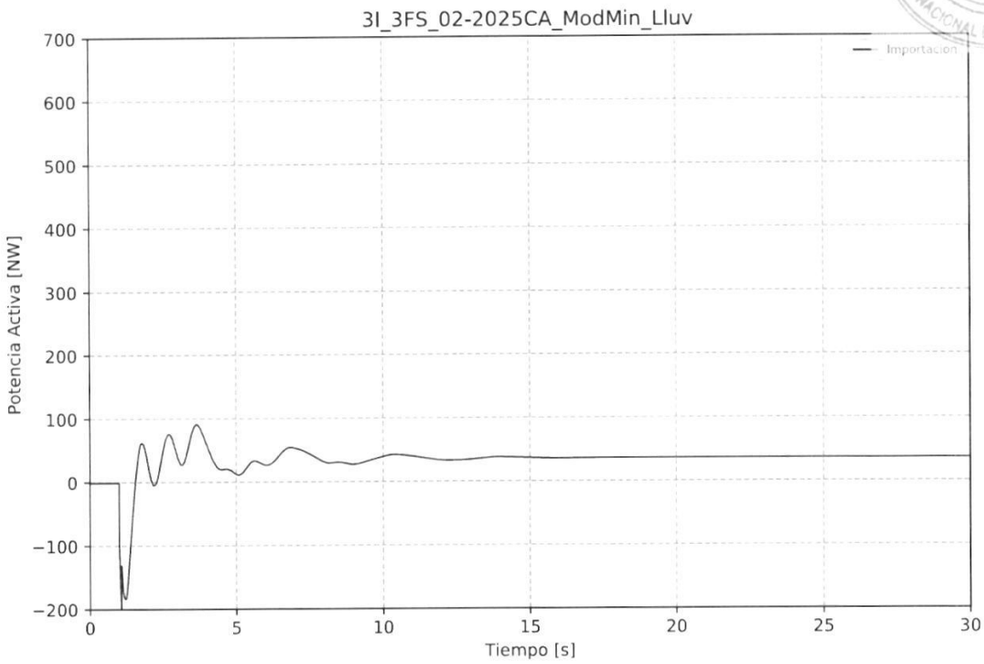

3I_3FS_02-2025CA_ModMedPm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
200
150
100
50
0
−50
−100
−150
−200
0
5
10
15
20
25
30
Tiempo [s]

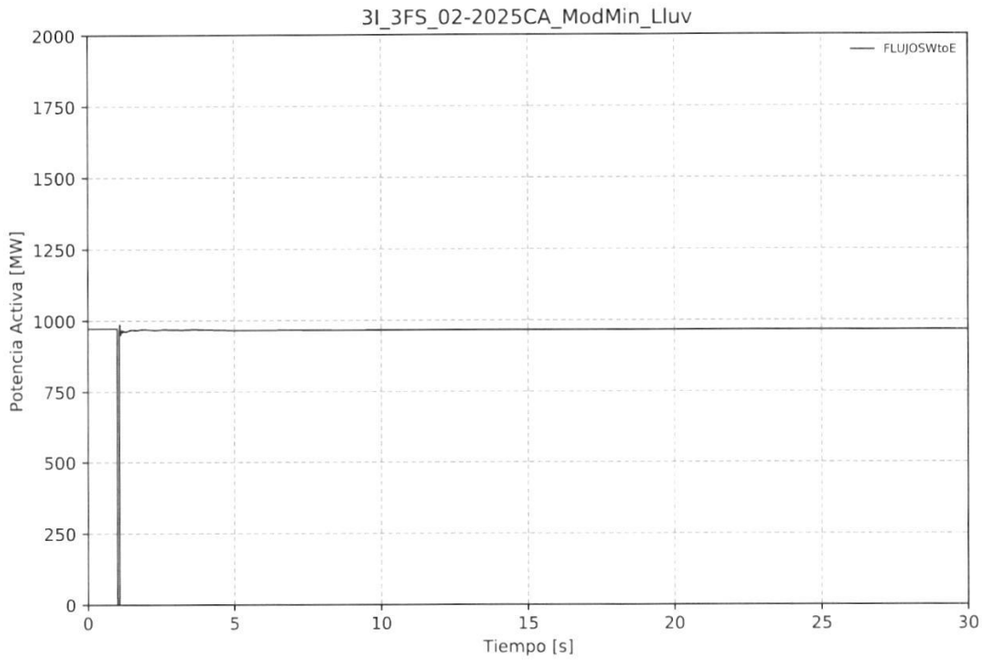
5788


3I_3FS_02-2025CA_ModMin_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

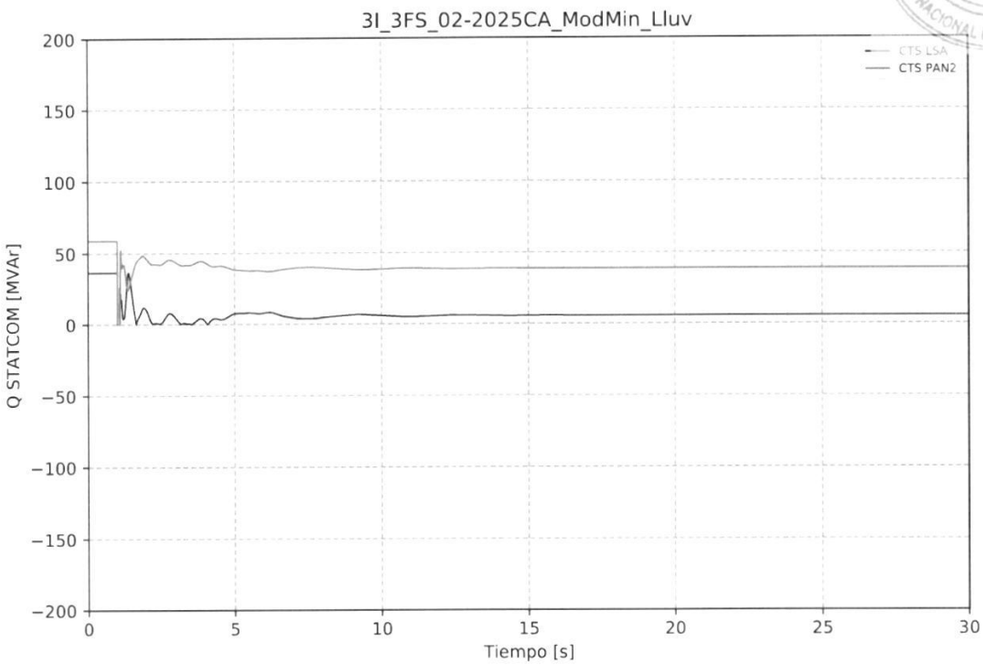

3I_3FS_02-2025CA_ModMin_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

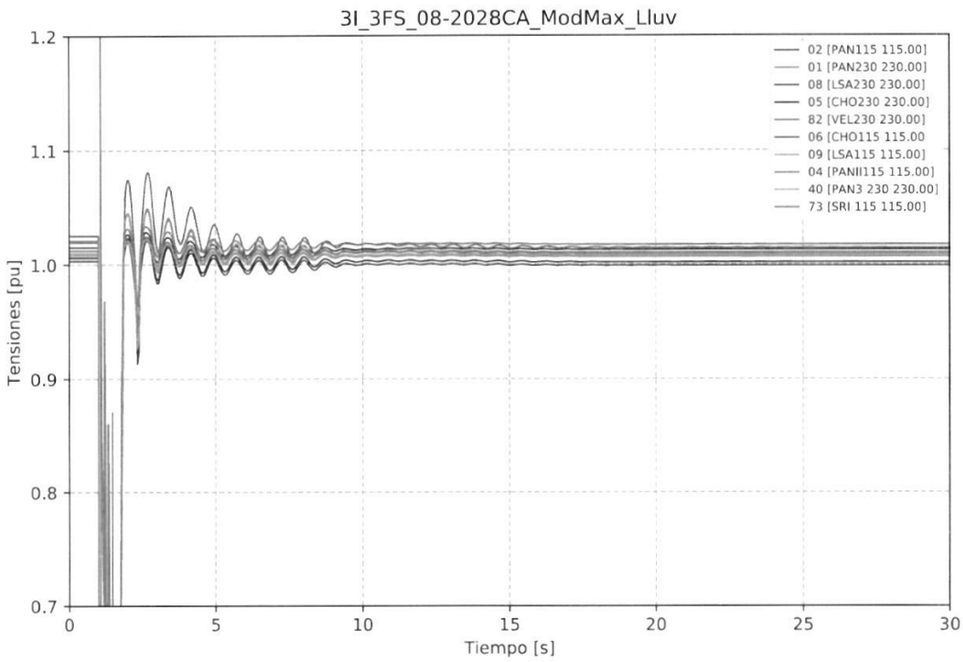
5789


3I_3FS_02-2025CA_ModMin_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

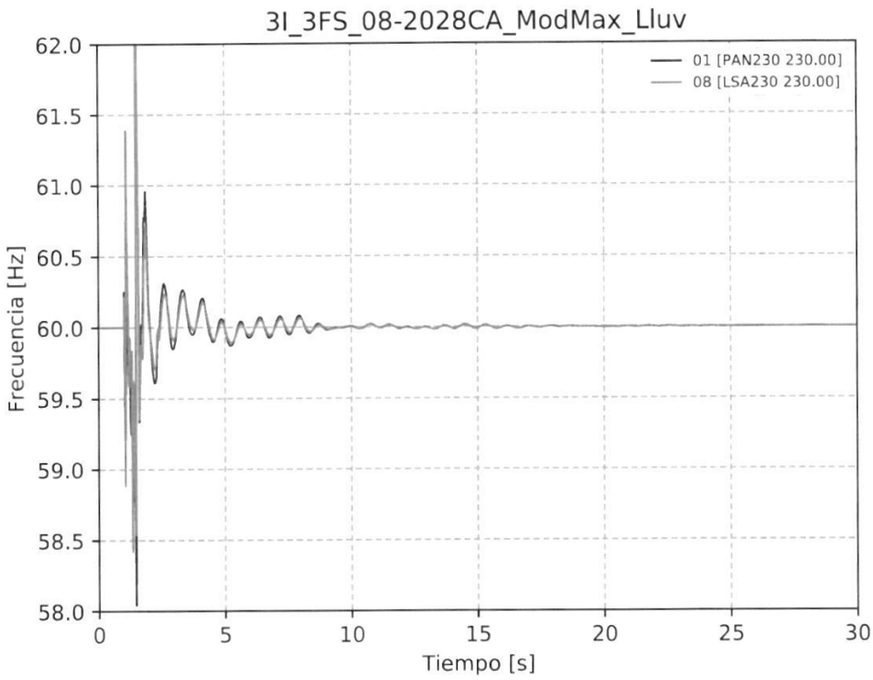

3I_3FS_02-2025CA_ModMin_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

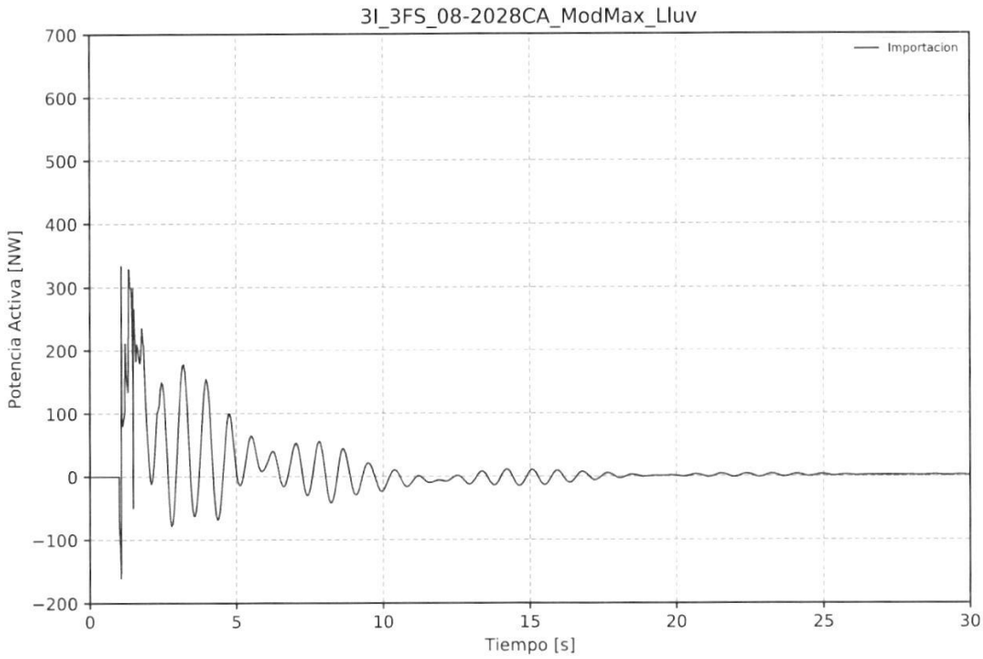
5790


3I_3FS_02-2025CA_ModMin_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

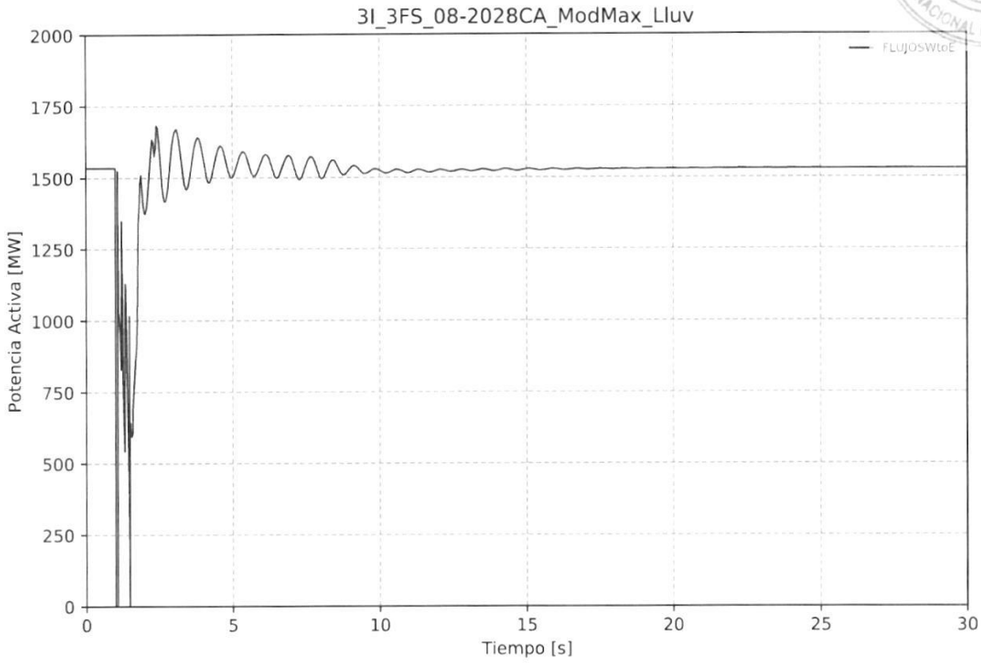

3I_3FS_08-2028CA_ModMax_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

5791


3I_3FS_08-2028CA_ModMax_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]


3I_3FS_08-2028CA_ModMax_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

5792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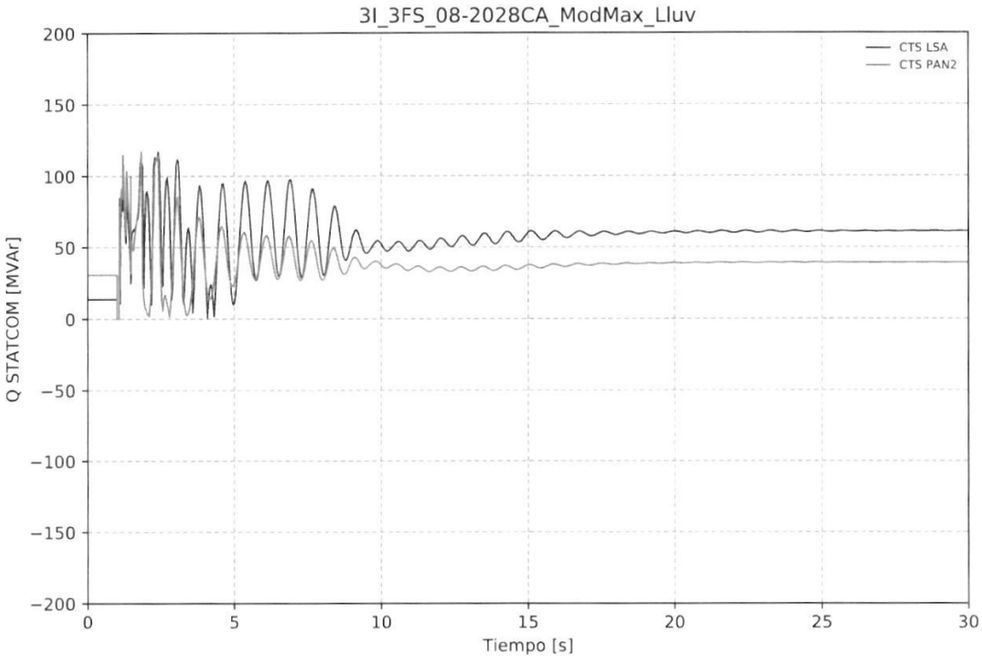
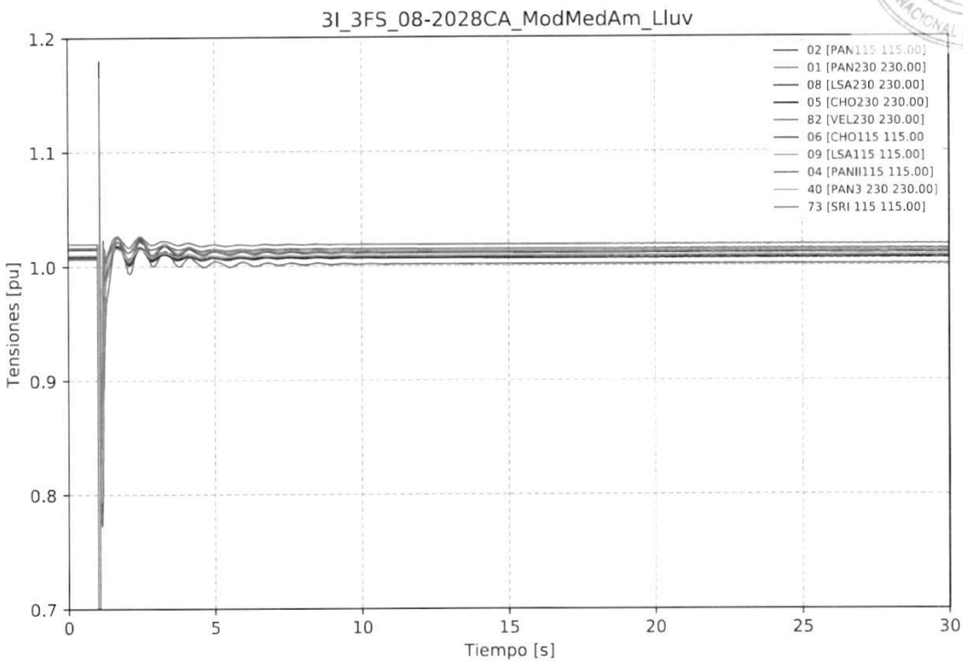
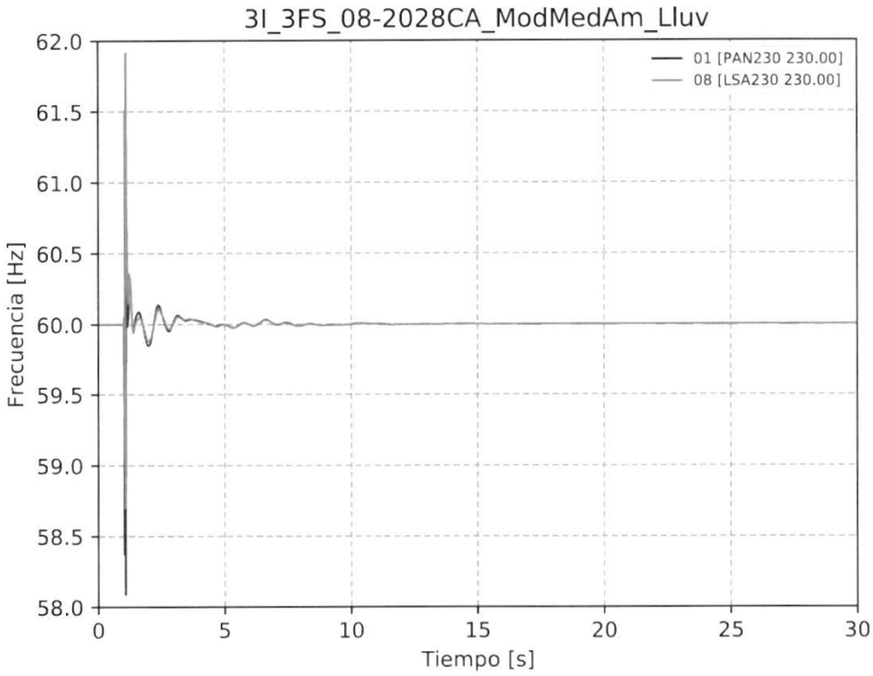
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

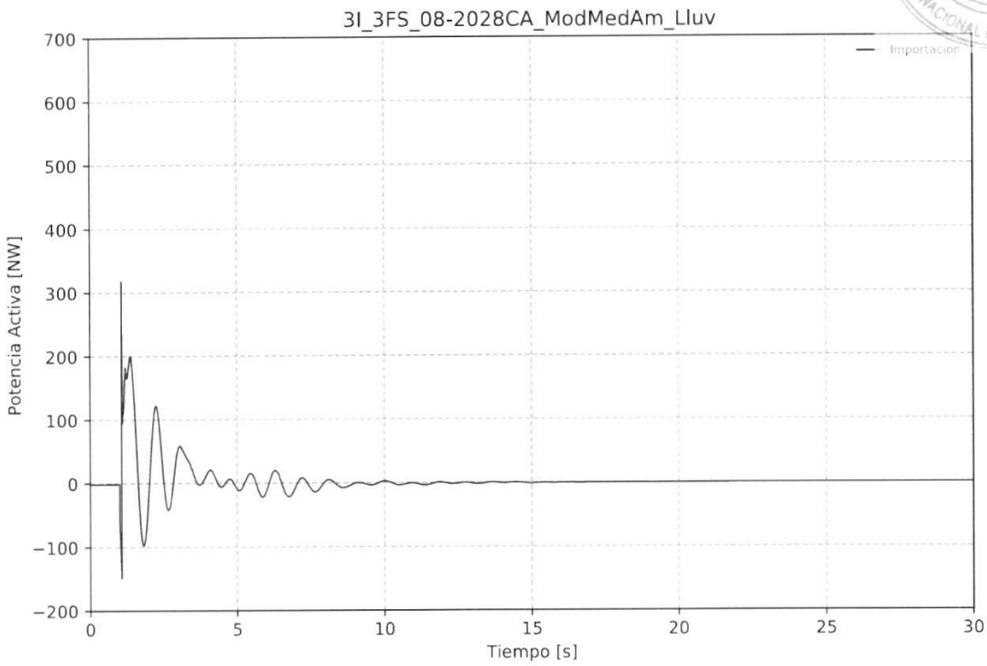

3I_3FS_08-2028CA_ModMax_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

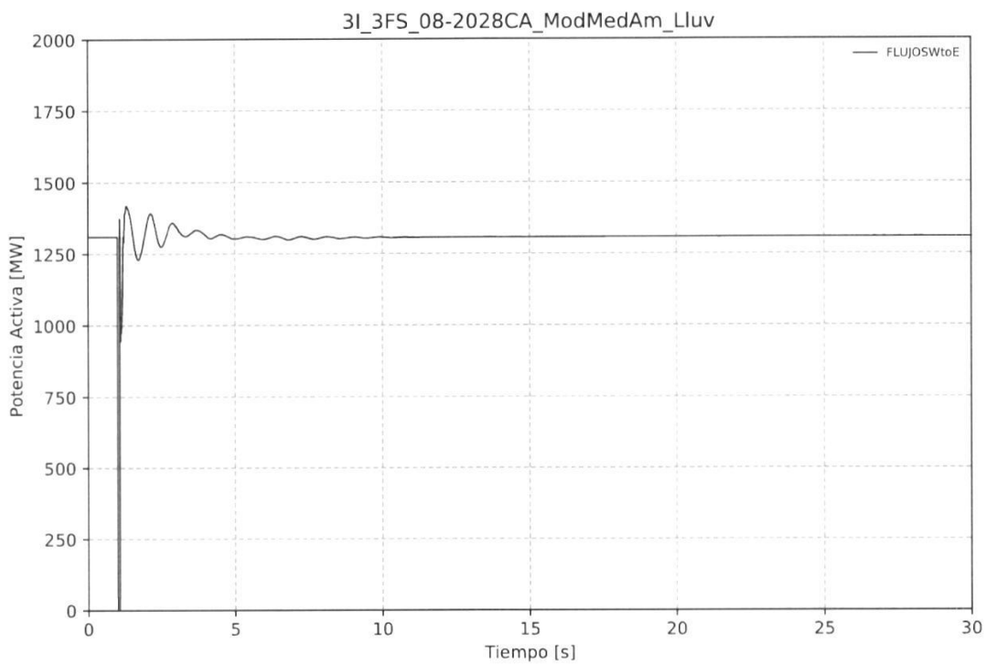
5793


3I_3FS_08-2028CA_ModMedAm_Lluv
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]

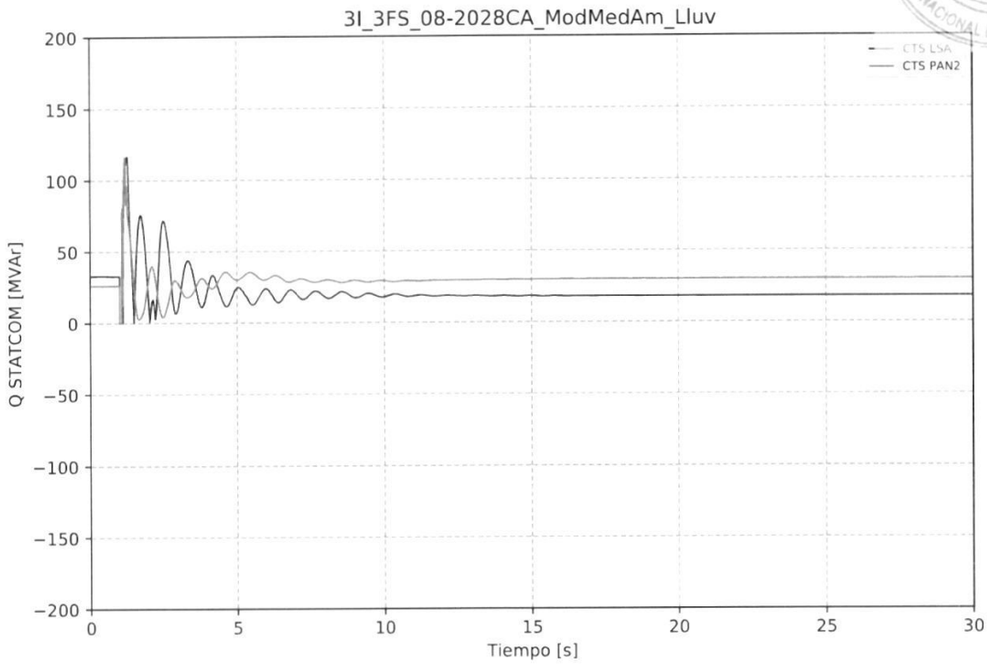

3I_3FS_08-2028CA_ModMedAm_Lluv
Frecuencia [Hz]
Tiempo [s]
01 [PAN230 230.00]
08 [LSA230 230.00]

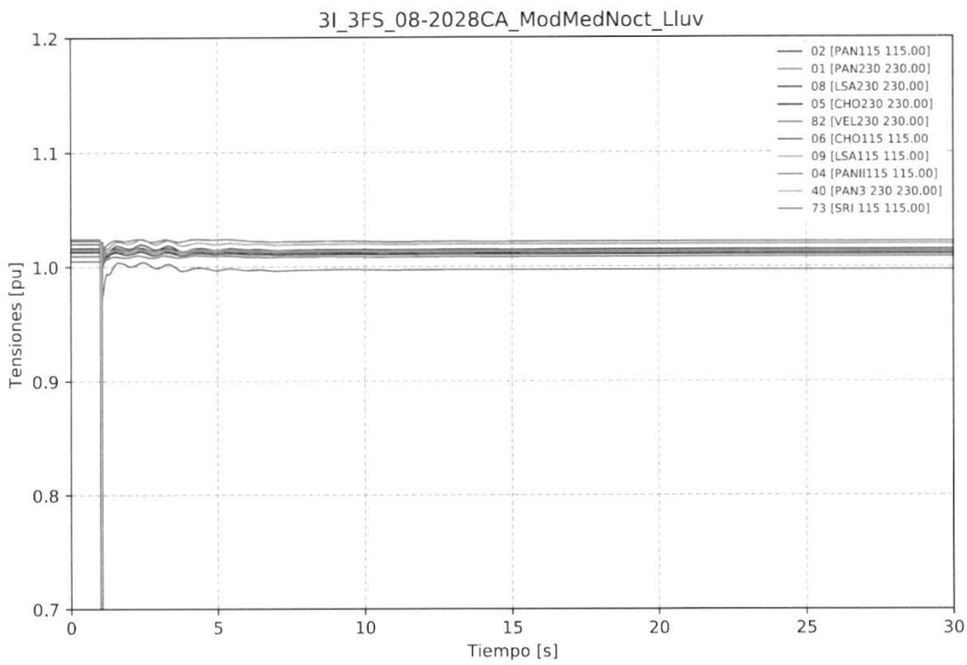
5794


3I_3FS_08-2028CA_ModMedAm_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

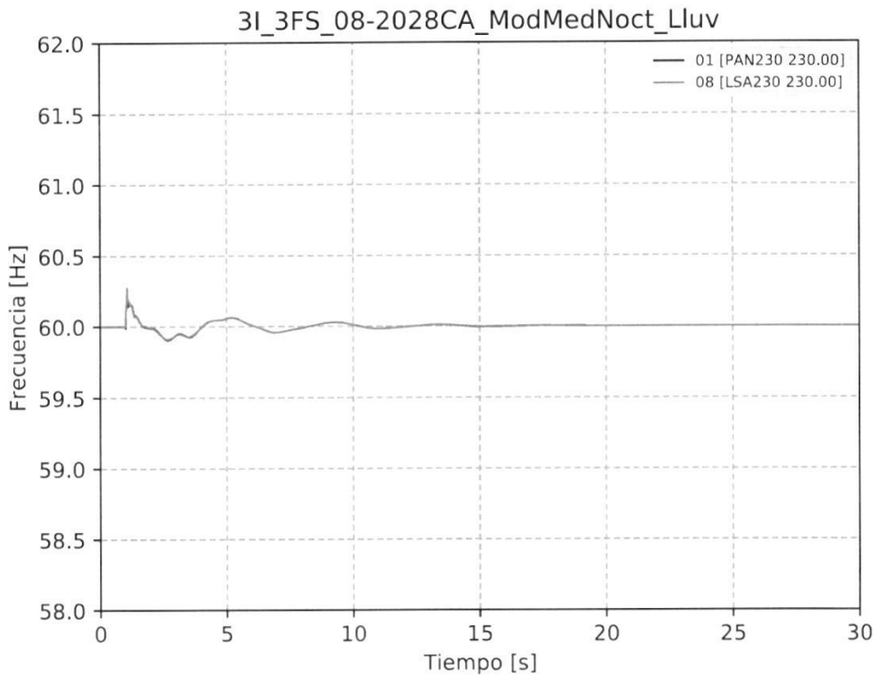

3I_3FS_08-2028CA_ModMedAm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]

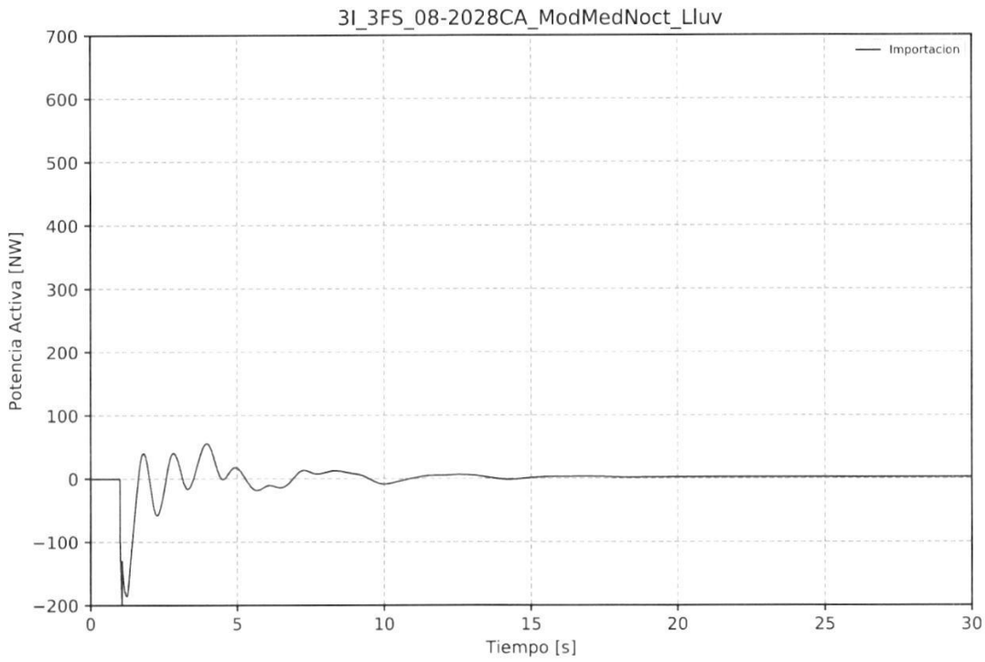
5795


3I_3FS_08-2028CA_ModMedAm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

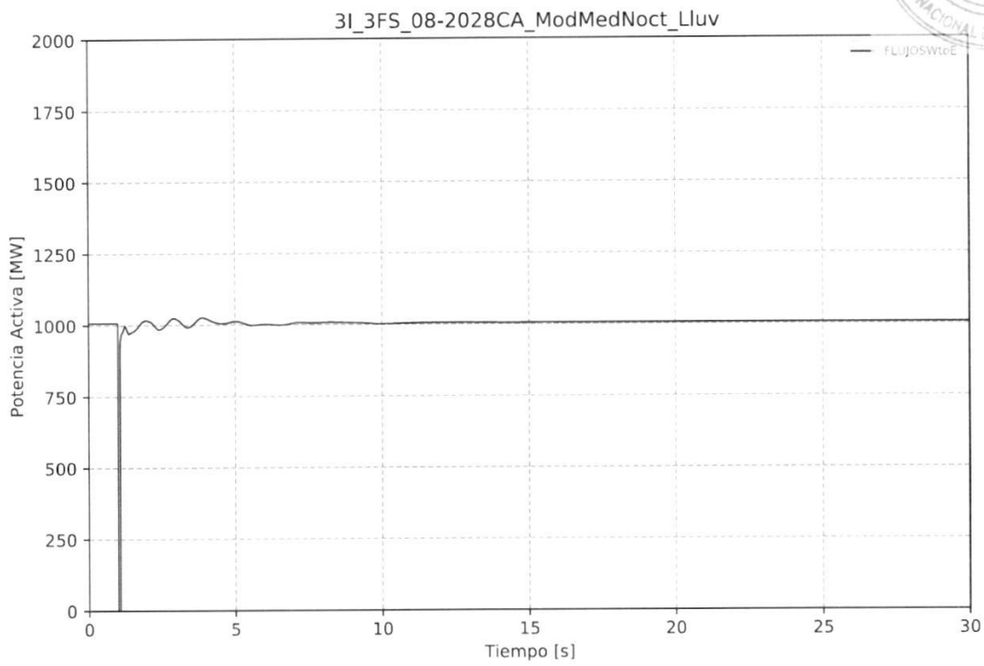

3I_3FS_08-2028CA_ModMedNoct_Lluv
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]

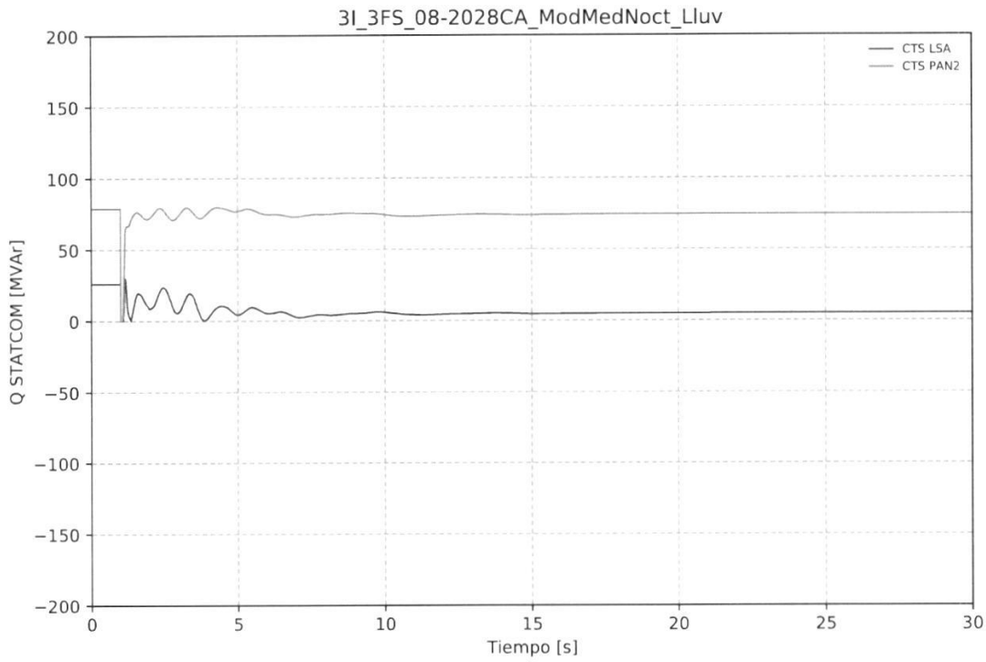
5796


3I_3FS_08-2028CA_ModMedNoct_Lluv
01 [PAN230 230.00]
08 [LSA230 230.00]
Frecuencia [Hz]
Tiempo [s]

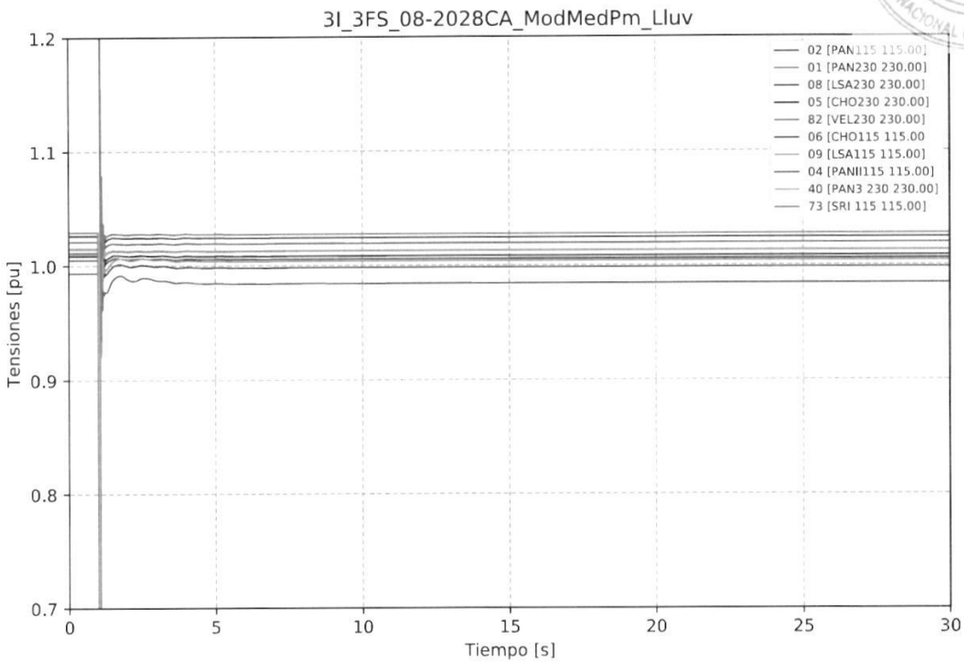

3I_3FS_08-2028CA_ModMedNoct_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]

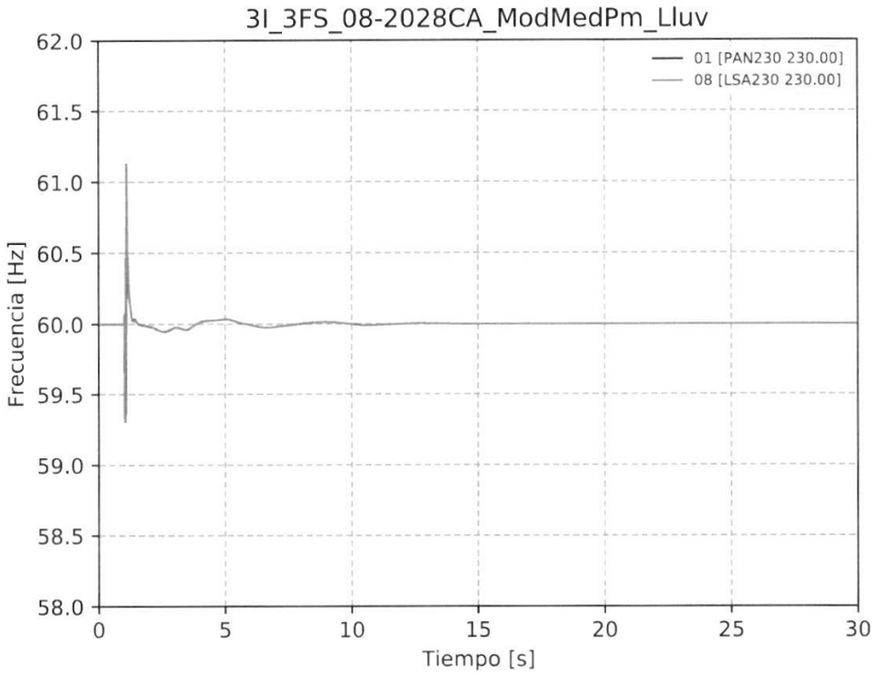
5797


3I_3FS_08-2028CA_ModMedNoct_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]


3I_3FS_08-2028CA_ModMedNoct_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]

5798


3I_3FS_08-2028CA_ModMedPm_Lluv
Tensiones [pu]
Tiempo [s]
02 [PAN115 115.00]
01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]


3I_3FS_08-2028CA_ModMedPm_Lluv
Frecuencia [Hz]
Tiempo [s]
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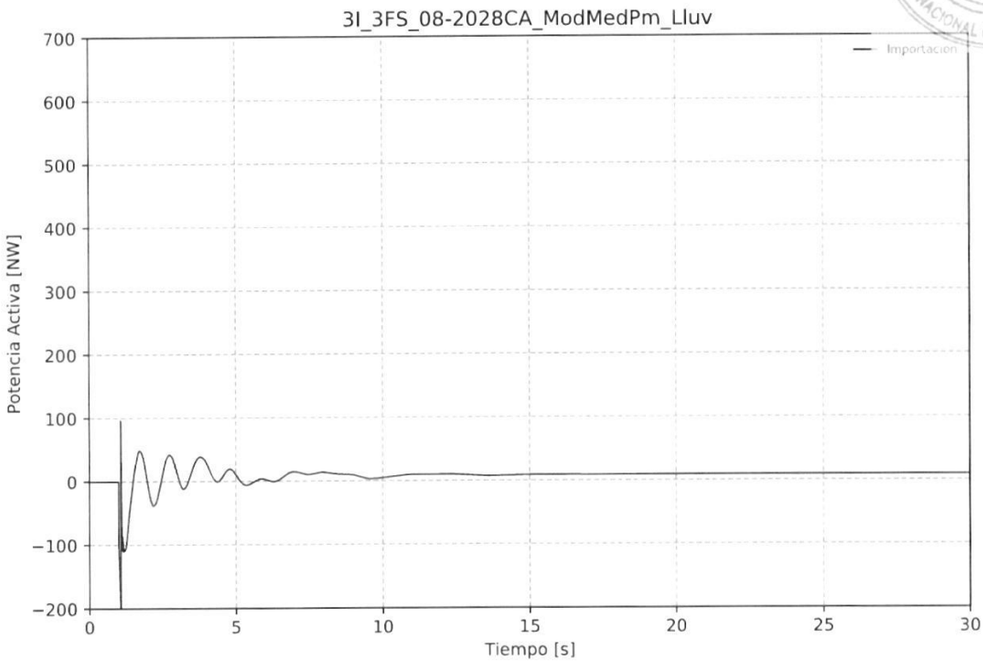
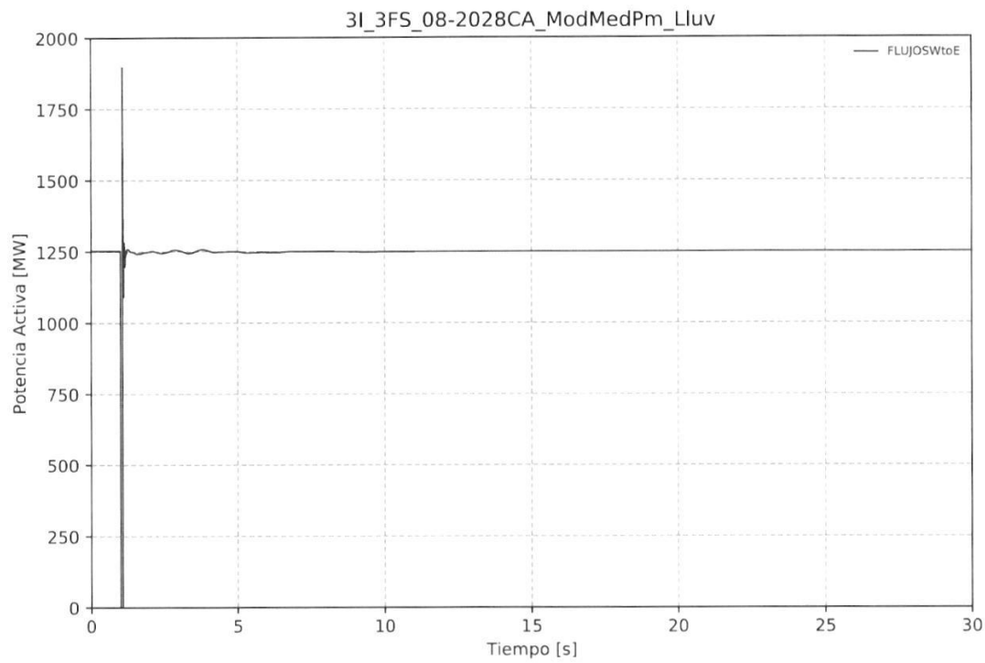
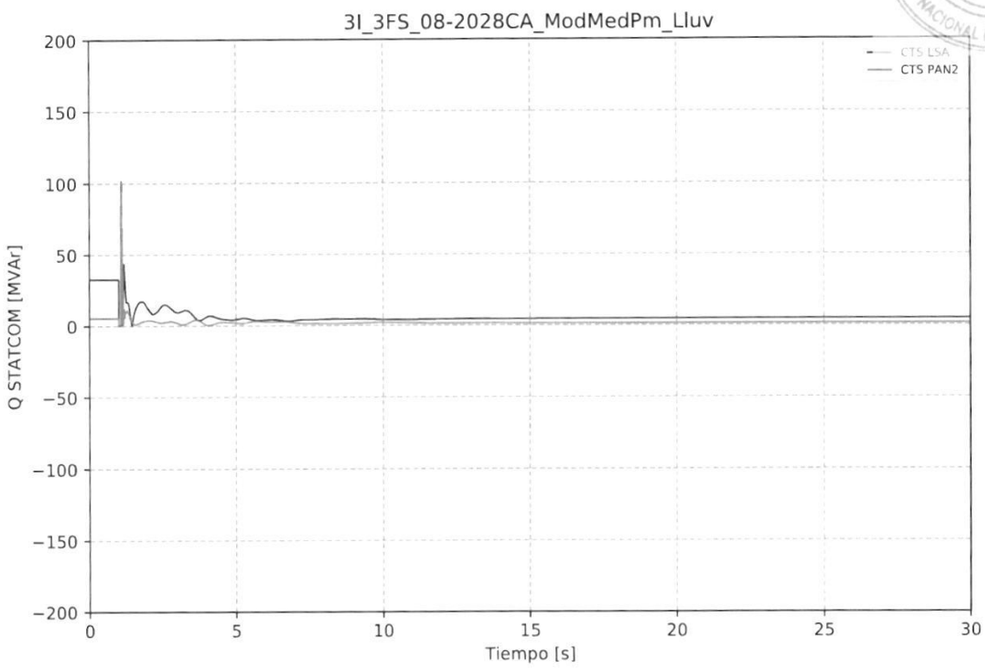
08 [LSA230 230.00]

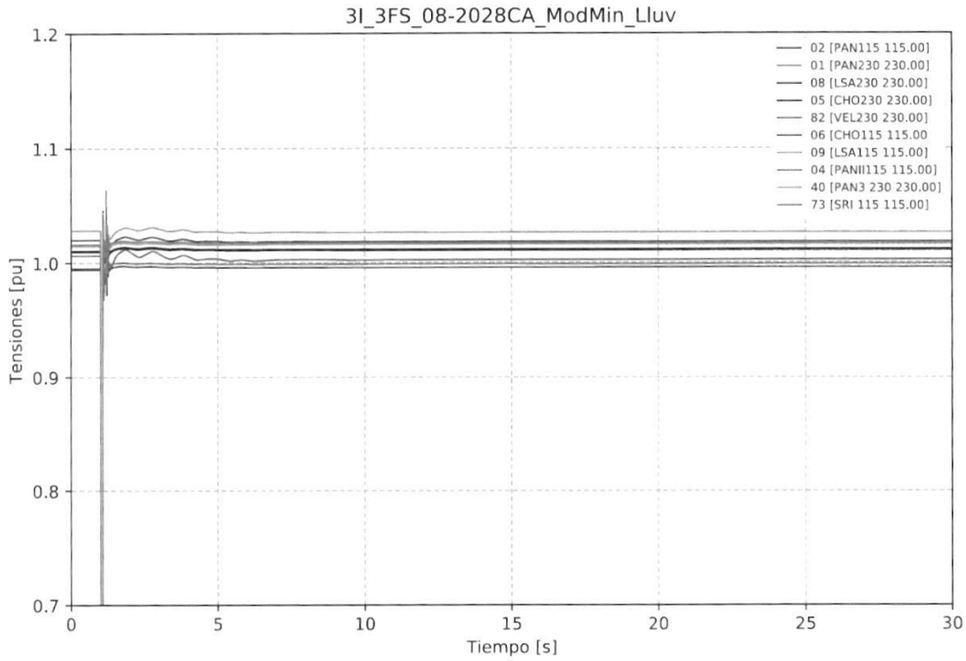
5799


3I_3FS_08-2028CA_ModMedPm_Lluv
Importacion
Potencia Activa [NW]
Tiempo [s]
700
600
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30


3I_3FS_08-2028CA_ModMedPm_Lluv
FLUJOSWtoE
Potencia Activa [MW]
Tiempo [s]
2000
1750
1500
1250
1000
750
500
250
0
0
5
10
15
20
25
30

5800


3I_3FS_08-2028CA_ModMedPm_Lluv
CTS LSA
CTS PAN2
Q STATCOM [MVAr]
Tiempo [s]


3I_3FS_08-2028CA_ModMin_Lluv
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01 [PAN230 230.00]
08 [LSA230 230.00]
05 [CHO230 230.00]
82 [VEL230 230.00]
06 [CHO115 115.00
09 [LSA115 115.00]
04 [PANII115 115.00]
40 [PAN3 230 230.00]
73 [SRI 115 115.00]
Tensiones [pu]
Tiempo [s]