SINGLE TEST RECORD FORM

Test No: 03_1	Profile edition No: 1	Tool: CRESO v6.3.0	Score: 4

Test files:

Import:	Export
ENTSO-E16_SP_12J11h_NL_EQ.xml ENTSO-E16_SP_12J11h_NL_SV.xml ENTSO-E16_SP_12J11h_NL_TP.xml ENTSO-E_Boundary_Set_4_May_2011_EU_EQ ENTSO-E_Boundary_Set_4_May_2011_EU_TP.xml	

Comments/Results/Issues:

CRESO imported the three CIM files of NL MAS previously exported by SPIRA and calculated power flow. The comparison of power flow results between CRESO and SPIRA is inside engineering tolerance of 5%.
You can see the comparison between the electrical quantities in the Amsterdam substation in the supplementary files.
It is possible to check all the power flow results in the file Creso_output.txt.

Supplementary files:
Creso_schema.pdf
Creso_data_summary.pdf
SPIRA_test_01_1_annex.docx
Creso_output.txt

Date	Vendor		Test witness	
12.07.2011	Name	Signature	Name	Signature
	Roberto Zacheo		Luca Gorello	

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu

SINGLE TEST RECORD FORM

Test No: 04_1	Profile edition No: 1	Tool: CRESO v6.3.0	Score: 4

Test files:

Import:	Export
ENTSO-E16nodes_part_NL_v11July_EQ.xml ENTSO-E16nodes_part_NL_v11July_TP.xml ENTSO-E16nodes_part_NL_v11July_SV.xml ENTSO-E_Boundary_Set_4_May_2011_EU_EQ.xml ENTSO-E_Boundary_Set_4_May_2011_EU_TP.xml	ENTSO-E_16_CR_12J15h_NL_TP.xml ENTSO-E_16_CR_12J15h_NL_SV.xml

Comments/Results/Issues:

The following topology changes are made:

- Change status of Breaker Tras49C3 between "SBARRA 0B" and "SBARRA E4" from Close to Open
- Change status of Breaker Tras 2436 between "SBARRA 6F" and "SBARRA 28" from Open to Close

Exported files have been checked successfully with CIMSpy.

The Naming Convention was respected.

Supplementary files:
Creso_schema.pdf
Creso_data_summary_test_04_1.pdf

Date	Vendor		Test witness	
12.07.2011	Name	Signature	Name	Signature
	Roberto Zacheo		Luca Gorello	

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu

SINGLE TEST RECORD FORM

Test No: 05_1	Profile edition No: 1	Tool: CRESO v6.3.0	Score: 4

Test files:

Import:	Export
ENTSO-E16nodes_part_NL_v11July_EQ.xml ENTSO-E16nodes_part_NL_v11July_TP.xml ENTSO-E16nodes_part_NL_v11July_SV.xml ENTSO-E_Boundary_Set_4_May_2011_EU_EQ.xml ENTSO-E_Boundary_Set_4_May_2011_EU_TP.xml	ENTSO-E_16_CR_12J16h_NL_SV.xml

Comments/Results/Issues:

The following solution changes are made:
Change of production of the unit "GTB" in Amsterdam power plant from 150 MW to 110 MW.
Change of load "Line" in Amsterdam substation from 290 MW to 250 MW.
Change of reference voltage of the generation unit "GI5" from 16.5 kV to 17 kV.

Exported file has been checked successfully with CIMSpy. The result of CIMSpy check is reported in the screenshot.

The Naming Convention was respected.

Supplementary files:
Creso_schema.pdf
Creso_data_summary.pdf
CIMSpy_test_05_1.PNG

Date	Vendor		Test witness	
12.07.2011	Name	Signature	Name	Signature
	Roberto Zacheo		Luca Gorello	

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu

SINGLE TEST RECORD FORM

Test No: 06_1	Profile edition No: 1	Tool: CRESO v6.3.0	Score: 4

Test files:

Import:	Export
ENTSO-E16nodes_part_NL_EQ.xml ENTSO-E16_SP_12J12h_NL_TP.xml ENTSO-E16_SP_12J12h_NL_SV.xml ENTSO-E_Boundary_Set_4_May_2011_EU_EQ.xml ENTSO-E_Boundary_Set_4_May_2011_EU_TP.xml	NA

Comments/Results/Issues:

The following topology changes are made:

- Change status of Breaker "Tras49C3" between "SBARRA 0B" and "SBARRA E4" from Close to Open
- Change status of Breaker "Tras 2436" between "SBARRA 6F" and "SBARRA 28" from Open to Close

The comparison of power flow results between the topology obtained by CRESO in the test 04_1 and the topology obtained in this test is inside engineering tolerance of 5%.
You can see the comparison between the electrical quantities in the Amsterdam substation in the supplementary files.

Supplementary files:

Creso_schema_test_04_1.pdf
Creso_schema_test_06_1.pdf
Creso_data_summary_test_04_1.pdf
Creso_data_summary_test_06_1.pdf

Date	Vendor		Test witness	
	Name	Signature	Name	Signature
12.07.2011	Roberto Zacheo		Luca Gorello	

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu

SINGLE TEST RECORD FORM

Test No: 07_1	Profile edition No: 1	Tool: CRESO v6.3.0	Score: 4

Test files:

Import:	Export
ENTSO-E16nodes_part_NL_EQ.xml ENTSO-E16nodes_part_NL_TP.xml ENTSOE_1_BE_OD_11J13h_SV.xml ENTSO-E_Boundary_Set_4_May_2011_EU_EQ.xml ENTSO-E_Boundary_Set_4_May_2011_EU_TP.xml	NA

Comments/Results/Issues:

CRESO imported the SV file from PSS-ODMS and performed power flow calculation correctly.
The differences between initial values of power flow of SV file and the results of power flow calculation are inside the tolerance (5%).

Supplementary files:
Creso_Schema.pdf
Creso_data_summary.pdf
Siemens_Loadflow.PNG

Date	Vendor		Test witness	
	Name	Signature	Name	Signature
12.07.2011	Roberto Zacheo		Luca Gorello	

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu

SINGLE TEST RECORD FORM

Test No: 08_1	Profile edition No: 1	Tool: CRESO v6.3.0	Score: 4

Test files:

Import:	Export
ENTSO-E16nodes_part_NL_v11July_EQ.xml ENTSO-E16nodes_part_NL_v11July_TP.xml ENTSO-E16nodes_part_NL_v11July_SV.xml ENTSO-E_Boundary_Set_4_May_2011_EU_EQ.xml ENTSO-E_Boundary_Set_4_May_2011_EU_TP.xml	NA

Comments/Results/Issues:

Short circuit calculations have been performed correctly.

Supplementary files:

report - Short circuit calculation.txt

Date	Vendor		Test witness	
	Name	Signature	Name	Signature
12.07.2011	Roberto Zacheo		Luca Gorello	

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu

SINGLE TEST RECORD FORM

Test No: 09_1	Profile edition No: 1	Tool: CRESO v6.3.0	Score: 4

Test files:

Import:	Export
ENTSO-E_Boundary_Set_4_May_2011_EU_EQ.xml	ENTSO-E_16_CR_12J12h_BE_EQ.xml
ENTSO-E_Boundary_Set_4_May_2011_EU_TP.xml	ENTSO-E_16_CR_12J12h_BE_TP.xml
ENTSO-E16nodes_part_BE_EQ.xml	ENTSO-E_16_CR_12J12h_NL_EQ.xml
ENTSO-E16nodes_part_BE_SV.xml	ENTSO-E_16_CR_12J12h_NL_TP.xml
ENTSO-E16nodes_part_BE_TP.xml	ENTSO-E_16_CR_12J13h_SV.xml
ENTSO-E16nodes_part_NL_EQ.xml	ENTSO-E_16_CR_12J12h_BE.zip
ENTSO-E16nodes_part_NL_SV.xml	ENTSO-E_16_CR_12J12h_NL.zip
ENTSO-E16nodes_part_NL_TP.xml	
ALL.zip	
ENTSO-E_16_CR_13J10h_NL_SV.xml	
ENTSO-E_16_CR_13J10h_NL_TP.xml	

Comments/Results/Issues:

The import / load flow / export have been executed correctly
The results of power flow are reported in the screenshots

The topology changes made are the same of test 04:

- Change status of Breaker Tras49C3 between "SBARRA 0B" and "SBARRA E4" from Close to Open
- Change status of Breaker Tras 2436 between "SBARRA 6F" and "SBARRA 28" from Open to Close

Supplementary files:
Screenshot files:
Amsterdam.PNG;
Amsterdam_Grafica.PNG;
Bruxelles.PNG;
Bruxelles_Grafica.PNG
Creso_schema_import_TP_SV_Test4_NL.pdf
Creso_schema_import_TP_SV_Test4_BE.pdf
Creso_data_summary_import_TP_SV_TEST4_NL.pdf
Creso_data_summary_import_TP_SV_TEST4_BE.pdf

Date	Vendor		Test witness	
	Name	Signature	Name	Signature
12.07.2011	Roberto Zacheo		Luca Gorello	

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu

SINGLE TEST RECORD FORM

Test No: 10_1	Profile edition No: 1	Tool: CRESO v6.3.0	Score: 4

Test files:

Import:	Export
ENTSO-E16_SP_12J16h_BE_EQ.xml ENTSO-E16_SP_12J16h_BE_TP.xml ENTSO-E16_SP_12J16h_NL_EQ.xml ENTSO-E16_SP_12J16h_NL_SV.xml ENTSO-E16_SP_12J16h_NL_TP.xml ENTSO-E_Boundary_Set_4_May_2011_EU_EQ.xml ENTSO-E_Boundary_Set_4_May_2011_EU_TP.xml	

Comments/Results/Issues:

The import of the network produced in the test No. 9 by SPIRA has been executed correctly
The power flow has been executed correctly. The comparison with the results of power flow performed by SPIRA is in supplementary files.

Supplementary files:

Creso_schema_NL.pdf
Creso_schema_BE.pdf
Creso_data_summary_NL.pdf
Creso_data_summary_BE.pdf
Test_09_1_Loadflowsolution2.pdf

Date	Vendor		Test witness	
	Name	Signature	Name	Signature
12.07.2011	Roberto Zacheo		Luca Gorello	

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu

TOOL SUMMARY FORM (PER TOOL)

Vendor/Tool: CESI / CRESO v6.3.0	Profile edition No: 2

Witnessed by

Name	Signature	Name	Signature
1. Luca Gorello	Luca Gorello	9.	
2.		10.	
3.		11.	
4.		12.	
5.		13.	
6.		14.	
7.		15.	
8.		16.	

Performed tests

Test No	Score	Test No	Score	Test No	Score	Test No	Score	Test No	Score
1_1	4								
1_2	4								
3_1	4								
6_1	4								
7_1	4								
9_1	2								
10_1	4								

Comments:

Date	Vendor		ENTSO-E	
	Name	Signature	Name	Signature
15.07.2011	Roberto Zacheo		Chavdar Ivanov	

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu

SINGLE TEST RECORD FORM

Test No: 01_1	Profile edition No: 2	Tool: CRESO v6.3.0	Score: 4

Test files:

Import	Export
ENTSOE_16_NL_EQ.xml ENTSOE_16_NL_SV.xml ENTSOE_16_NL_TP.xml ENTSO-E_Boundary_Set_28_June_2011_2ndEdition_EU_EQ.xml ENTSO-E_Boundary_Set_28_June_2011_2ndEdition_EU_TP.xml	

Comments/Results/Issues:

CRESO imports all three files; the load flow is solved correctly

The result of power flow for Amsterdam substation is reported in the screenshot

Supplementary files:
Creso_Schema.pdf
Creso_Data_Summary.pdf

Date	Vendor		Test witness	
	Name	Signature	Name	Signature
13.07.2011	Roberto Zacheo		Luca Gorello	

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu

SINGLE TEST RECORD FORM

Test No: 01_2	Profile edition No: 2	Tool: CRESO v6.3.0	Score: 4

Test files:

Import	Export
ENTSOE_16_BE_EQ.xml ENTSOE_16_BE_SV.xml ENTSOE_16_BE_TP.xml ENTSO-E_Boundary_Set_28_June_2011_2ndEdition_EU_EQ.xml ENTSO-E_Boundary_Set_28_June_2011_2ndEdition_EU_TP.xml	

Comments/Results/Issues:

CRESO imports all three files; the load flow is solved correctly

The result of power flow for Amsterdam substation is reported in the screenshot

Supplementary files:
Creso_Schema.pdf
Creso_Data_Summary.pdf

Date	Vendor		Test witness	
13.07.2011	Name	Signature	Name	Signature
	Roberto Zacheo		Luca Gorello	

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu

SINGLE TEST RECORD FORM

Test No: 03_1	Profile edition No: 2	Tool: CRESO v6.3.0	Score: 4

Test files:

Import:	Export
tennet.eu_NL_EQ.xml tennet.eu_NL_TP.xml ENTSO-E_16_PF_12J11h_NL_SV.xml ENTSO-E_Boundary_Set_28_June_2011_2ndEdition_EU_EQ.xml ENTSO-E_Boundary_Set_28_June_2011_2ndEdition_EU_TP.xml	

Comments/Results/Issues:

CRESO imported the three CIM files of NL MAS previously exported by DIG Silent PF and calculated power flow. The comparison of power flow results between CRESO and DIG Silent PF is inside engineering tolerance of 5%.
You can see the comparison between the electrical quantities in the Amsterdam substation in the supplementary files.
It is possible to check all the power flow results in the file Creso_output.txt.

Supplementary files:
Creso_Schema.pdf
Creso_Data_Summary.pdf
DIG_Silent_PF_ldfresults_NL.png
Creso_output.txt

Date	Vendor		Test witness	
	Name	Signature	Name	Signature
13.07.2011	Roberto Zacheo		Luca Gorello	

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu

SINGLE TEST RECORD FORM

Test No: 06_1	Profile edition No: 2	Tool: CRESO v6.3.0	Score: 4

Test files:

Import:	Export
ENTSOE_16_NL_EQ.xml ENTSO-E_16_PF_13J09h_NL_SV.xml tennet.eu_NL_TP.xml ENTSO-E_Boundary_Set_28_June_2011_2ndEdition_EU_EQ.xml ENTSO-E_Boundary_Set_28_June_2011_2ndEdition_EU_TP.xml	

Comments/Results/Issues:

The following topology changes are made:

- Change status of Breaker "Tras49C3" between "SBARRA 0B" and "SBARRA E4" from Close to Open

The comparison of power flow results between the topology obtained by DIG Silent PF in the test 04_1 and the topology obtained in this test is inside engineering tolerance of 5%.
You can see the comparison between the electrical quantities in the Amsterdam substation in the supplementary files.

Supplementary files:
Creso_schema.pdf
Creso_data_summary.pdf
DIG_Silent_PF_ldfresults_NL.png

Date	Vendor		Test witness	
	Name	Signature	Name	Signature
14.07.2011	Roberto Zacheo		Luca Gorello	

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu

SINGLE TEST RECORD FORM

Test No: 07_1	Profile edition No: 2	Tool: CRESO v6.3.0	Score: 4

Test files:

Import:	Export
ENTSOE_16_NL_EQ.xml ENTSOE_16_NL_TP.xml ENTSO-E_16_PF_13J09h_NL_SV.xml ENTSO-E_Boundary_Set_28_June_2011_2ndEdition_EU_EQ.xml ENTSO-E_Boundary_Set_28_June_2011_2ndEdition_EU_TP.xml	

Comments/Results/Issues:

CRESO imported the SV file from DIG Silent PF and performed power flow calculation correctly.
The differences between initial values of power flow of SV file and the results of power flow calculation are inside the tolerance (5%).

Supplementary files:
Creso_schema.pdf
Creso_data_summary.pdf
DIG_Silent_PF_ldfresults_NL.png

Date	Vendor		Test witness	
14.07.2011	Name	Signature	Name	Signature
	Roberto Zacheo		Luca Gorello	

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1000 Brussels • Belgium • Tel +32 2 741 09 50 • Fax +32 2 741 09 51 • info@entsoe.eu • www.entsoe.eu