Meth8 Logic Model Checker

This marketing collateral describes a logic model checker (LMC) named Meth8. The purpose is to show results of the tested proposition or theorem for those portions **not** proved in five models. (Output sample for axiom K follows.)

The 17 established logical systems supported are

Three valued: Gödel, Halldén, Kleene-3 strong and weak, Lukasiewicz-3, Priest; and

Four valued: Béziau, Dunn Belnap, Kleene-4, Lewis/Langford 4.1-4.5, Rescher B4 and E4, Łukasiewicz-4 (VL4).

The underlying logical system is named VL4, a variant of the four-valued logic L4 of Łukasiewicz with its anomalies corrected.

Two versions of Meth8 are in production, with pricing on request:

1. 4-propositions and 4-theorems; and

2. 24-propositions and 12-theorems.

Deliverables include:

Executable file with license;

Published academic paper describing VL4;

User instructions; and

12-month support (M-F, 8-5).

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Output file location: C:\projects\4vbc neuron\source code\VL4.20160717.08.14.48.txt

Test input as accepted is: #(A>B)>(#A>#B) [# Necessarily; > implication]
Test input as processed is: #(A>B)>(#A>#B)

A

Model 1	Model 2.1	Model 2.2	Model 2.3.1	Model 2.3.2
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE
FCNT FCNT FCNT FCNT	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE	UIPE UIPE UIPE UIPE

FCNT is: False, Contingent, Non contingent, True. UIPE is: Unevaluated, Improper, Permissible, Evaluated.

B

Model 1	Model 2.1	Model 2.2	Model 2.3.1	Model 2.3.2
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE
FFFF CCCC NNNN TTTT	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE	UUUU IIII PPPP EEEE

FCNT is: False, Contingent, Non contingent, True. UIPE is: Unevaluated, Improper, Permissible, Evaluated.

#A

Model 1	Model 2.1	Model 2.2	Model 2.3.1	Model 2.3.2
FFNN FFNN FFNN FFNN	UIPE UIPE UIPE UIPE	UUUU UUUU UUUU UUUU	UIUI UIUI UIUI UIUI	UUPP UUPP UUPP UUPP
FFNN FFNN FFNN FFNN	UIPE UIPE UIPE UIPE	UUUU UUUU UUUU UUUU	UIUI UIUI UIUI UIUI	UUPP UUPP UUPP UUPP
FFNN FFNN FFNN FFNN	UIPE UIPE UIPE UIPE	UUUU UUUU UUUU UUUU	UIUI UIUI UIUI UIUI	UUPP UUPP UUPP UUPP
FFNN FFNN FFNN FFNN	UIPE UIPE UIPE UIPE	UUUU UUUU UUUU UUUU	UIUI UIUI UIUI UIUI	UUPP UUPP UUPP UUPP
FFNN FFNN FFNN FFNN	UIPE UIPE UIPE UIPE	UUUU UUUU UUUU UUUU	UIUI UIUI UIUI UIUI	UUPP UUPP UUPP UUPP
FFNN FFNN FFNN FFNN	UIPE UIPE UIPE UIPE	UUUU UUUU UUUU UUUU	UIUI UIUI UIUI UIUI	UUPP UUPP UUPP UUPP
FFNN FFNN FFNN FFNN	UIPE UIPE UIPE UIPE	UUUU UUUU UUUU UUUU	UIUI UIUI UIUI UIUI	UUPP UUPP UUPP UUPP
FFNN FFNN FFNN FFNN	UIPE UIPE UIPE UIPE	UUUU UUUU UUUU UUUU	UIUI UIUI UIUI UIUI	UUPP UUPP UUPP UUPP
FFNN FFNN FFNN FFNN	UIPE UIPE UIPE UIPE	UUUU UUUU UUUU UUUU	UIUI UIUI UIUI UIUI	UUPP UUPP UUPP UUPP
FFNN FFNN FFNN FFNN	UIPE UIPE UIPE UIPE	UUUU UUUU UUUU UUUU	UIUI UIUI UIUI UIUI	UUPP UUPP UUPP UUPP
FFNN FFNN FFNN FFNN	UIPE UIPE UIPE UIPE	UUUU UUUU UUUU UUUU	UIUI UIUI UIUI UIUI	UUPP UUPP UUPP UUPP
FFNN FFNN FFNN FFNN	UIPE UIPE UIPE UIPE	UUUU UUUU UUUU UUUU	UIUI UIUI UIUI UIUI	UUPP UUPP UUPP UUPP
FFNN FFNN FFNN FFNN	UIPE UIPE UIPE UIPE	UUUU UUUU UUUU UUUU	UIUI UIUI UIUI UIUI	UUPP UUPP UUPP UUPP
FFNN FFNN FFNN FFNN	UIPE UIPE UIPE UIPE	UUUU UUUU UUUU UUUU	UIUI UIUI UIUI UIUI	UUPP UUPP UUPP UUPP

FCNT is: False, Contingent, Non contingent, True. UIPE is: Unevaluated, Improper, Permissible, Evaluated.

#B

Model 1	Model 2.1	Model 2.2	Model 2.3.1	Model 2.3.2
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP
FFFF FFFF NNNN NNNN	UUUU IIII PPPP EEEE	UUUU UUUU UUUU UUUU	UUUU IIII UUUU IIII	UUUU UUUU PPPP PPPP

FCNT is: False, Contingent, Non contingent, True. UIPE is: Unevaluated, Improper, Permissible, Evaluated.

#(A>B)

Model 1	Model 2.1	Model 2.2	Model 2.3.1	Model 2.3.2
NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUUU UUUU UUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUUU UUUU UUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUUU UUUU UUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUUU UUUU UUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUUU UUUU UUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUUU UUUU UUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUUU UUUU UUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUUU UUUU UUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUUU UUUU UUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUUU UUUU UUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUUU UUUU UUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUUU UUUU UUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUUU UUUU UUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUUU UUUU UUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP

FCNT is: False, Contingent, Non contingent, True. UIPE is: Unevaluated, Improper, Permissible, Evaluated.

(#A>#B)

Model 1	Model 2.1	Model 2.2	Model 2.3.1	Model 2.3.2
TTCC TTCC TTTT TTTT	EPIU EEII EPEP EEEE	EEEE EEEE EEEE EEEE	EPEP EEEE EPEP EEEE	EEII EEII EEEE EEEE
TTCC TTCC TTTT TTTT	EPIU EEII EPEP EEEE	EEEE EEEE EEEE EEEE	EPEP EEEE EPEP EEEE	EEII EEII EEEE EEEE
TTCC TTCC TTTT TTTT	EPIU EEII EPEP EEEE	EEEE EEEE EEEE EEEE	EPEP EEEE EPEP EEEE	EEII EEII EEEE EEEE
TTCC TTCC TTTT TTTT	EPIU EEII EPEP EEEE	EEEE EEEE EEEE EEEE	EPEP EEEE EPEP EEEE	EEII EEII EEEE EEEE
TTCC TTCC TTTT TTTT	EPIU EEII EPEP EEEE	EEEE EEEE EEEE EEEE	EPEP EEEE EPEP EEEE	EEII EEII EEEE EEEE
TTCC TTCC TTTT TTTT	EPIU EEII EPEP EEEE	EEEE EEEE EEEE EEEE	EPEP EEEE EPEP EEEE	EEII EEII EEEE EEEE
TTCC TTCC TTTT TTTT	EPIU EEII EPEP EEEE	EEEE EEEE EEEE EEEE	EPEP EEEE EPEP EEEE	EEII EEII EEEE EEEE
TTCC TTCC TTTT TTTT	EPIU EEII EPEP EEEE	EEEE EEEE EEEE EEEE	EPEP EEEE EPEP EEEE	EEII EEII EEEE EEEE
TTCC TTCC TTTT TTTT	EPIU EEII EPEP EEEE	EEEE EEEE EEEE EEEE	EPEP EEEE EPEP EEEE	EEII EEII EEEE EEEE
TTCC TTCC TTTT TTTT	EPIU EEII EPEP EEEE	EEEE EEEE EEEE EEEE	EPEP EEEE EPEP EEEE	EEII EEII EEEE EEEE
TTCC TTCC TTTT TTTT	EPIU EEII EPEP EEEE	EEEE EEEE EEEE EEEE	EPEP EEEE EPEP EEEE	EEII EEII EEEE EEEE
TTCC TTCC TTTT TTTT	EPIU EEII EPEP EEEE	EEEE EEEE EEEE EEEE	EPEP EEEE EPEP EEEE	EEII EEII EEEE EEEE
TTCC TTCC TTTT TTTT	EPIU EEII EPEP EEEE	EEEE EEEE EEEE EEEE	EPEP EEEE EPEP EEEE	EEII EEII EEEE EEEE
TTCC TTCC TTTT TTTT	EPIU EEII EPEP EEEE	EEEE EEEE EEEE EEEE	EPEP EEEE EPEP EEEE	EEII EEII EEEE EEEE

FCNT is: False, Contingent, Non contingent, True. UIPE is: Unevaluated, Improper, Permissible, Evaluated.

#(A>B)>(#A>#B)

Model 1	Model 2.1	Model 2.2	Model 2.3.1	Model 2.3.2			
TTTT TTTT TTTT TTTT	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE
TTTT TTTT TTTT TTTT	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE
TTTT TTTT TTTT TTTT	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE
TTTT TTTT TTTT TTTT	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE
TTTT TTTT TTTT TTTT	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE
TTTT TTTT TTTT TTTT	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE
TTTT TTTT TTTT TTTT	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE
TTTT TTTT TTTT TTTT	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE
TTTT TTTT TTTT TTTT	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE
TTTT TTTT TTTT TTTT	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE
TTTT TTTT TTTT TTTT	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE
TTTT TTTT TTTT TTTT	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE
TTTT TTTT TTTT TTTT	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE	EEEE EEEE EEEE EEEE

FCNT is: False, Contingent, Non contingent, True. UIPE is: Unevaluated, Improper, Permissible, Evaluated.

[Proof is all "T" for Model 1 and all "E" for Models 2.]

Sample output from the Meth8 model checker and modal logic theorem prover

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Below is sample output from the engine for this expression:

(#(~(%A & ~B)) & #~A)

where

~ is Negation, # is Necessarily, and % is Possibly.

The logic system used is VŁ4, a variant of the Łucasiewicz Ł4 that corrects its problems.

Real time performance is linear (look up table driven) and does not degrade by number of literal variables.

Small Meth8 supports literal variables for 4 propositions and 4 theorems and is $10,000.

Large Meth8 supports literal variables for 24 propositions and 12 theorems and is $100,000.

Pricing includes modules as they become available after testing for these logic systems:

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True BASIC Gold Edition

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	1	2	3	4	5
Argument	Model 1.0	Model 2.1	Model 2.2	Model 2.3.1	Model 2.3.2
#(~(%A&~B))	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
	NNFF NNFF NNNN NNNN	EPIU EEII EPEP EEEE	UUUU UUU UUUU UUUUU	IUIU IIII IUIU IIII	PPUU PPUU PPPP PPPP
~(%A&~B)	NNFF TTCC NNNN TTTT	EPIU EEII EPEP EEEE	UUUU IIII PPPP EEEE	IUIU IIII EPEP EEEE	PPUU EEII PPPP EEEE
	NNFF TTCC NNNN TTTT	EPIU EEII EPEP EEEE	UUUU IIII PPPP EEEE	IUIU IIII EPEP EEEE	PPUU EEII PPPP EEEE
	NNFF TTCC NNNN TTTT	EPIU EEII EPEP EEEE	UUUU IIII PPPP EEEE	IUIU IIII EPEP EEEE	PPUU EEII PPPP EEEE
	NNFF TTCC NNNN TTTT	EPIU EEII EPEP EEEE	UUUU IIII PPPP EEEE	IUIU IIII EPEP EEEE	PPUU EEII PPPP EEEE
	NNFF TTCC NNNN TTTT	EPIU EEII EPEP EEEE	UUUU IIII PPPP EEEE	IUIU IIII EPEP EEEE	PPUU EEII PPPP EEEE
	NNFF TTCC NNNN TTTT	EPIU EEII EPEP EEEE	UUUU IIII PPPP EEEE	IUIU IIII EPEP EEEE	PPUU EEII PPPP EEEE
	NNFF TTCC NNNN TTTT	EPIU EEII EPEP EEEE	UUUU IIII PPPP EEEE	IUIU IIII EPEP EEEE	PPUU EEII PPPP EEEE
	NNFF TTCC NNNN TTTT	EPIU EEII EPEP EEEE	UUUU IIII PPPP EEEE	IUIU IIII EPEP EEEE	PPUU EEII PPPP EEEE
	NNFF TTCC NNNN TTTT	EPIU EEII EPEP EEEE	UUUU IIII PPPP EEEE	IUIU IIII EPEP EEEE	PPUU EEII PPPP EEEE
	NNFF TTCC NNNN TTTT	EPIU EEII EPEP EEEE	UUUU IIII PPPP EEEE	IUIU IIII EPEP EEEE	PPUU EEII PPPP EEEE
	NNFF TTCC NNNN TTTT	EPIU EEII EPEP EEEE	UUUU IIII PPPP EEEE	IUIU IIII EPEP EEEE	PPUU EEII PPPP EEEE
	NNFF TTCC NNNN TTTT	EPIU EEII EPEP EEEE	UUUU IIII PPPP EEEE	IUIU IIII EPEP EEEE	PPUU EEII PPPP EEEE
	NNFF TTCC NNNN TTTT	EPIU EEII EPEP EEEE	UUUU IIII PPPP EEEE	IUIU IIII EPEP EEEE	PPUU EEII PPPP EEEE
	NNFF TTCC NNNN TTTT	EPIU EEII EPEP EEEE	UUUU IIII PPPP EEEE	IUIU IIII EPEP EEEE	PPUU EEII PPPP EEEE
%A	CCTT CCTT CCTT CCTT	UIPE UIPE UIPE UIPE	EEEE EEEE EEEE EEEE	PEPE PEPE PEPE PEPE	IIEE IIEE IIEE IIEE
	CCTT CCTT CCTT CCTT	UIPE UIPE UIPE UIPE	EEEE EEEE EEEE EEEE	PEPE PEPE PEPE PEPE	IIEE IIEE IIEE IIEE
	CCTT CCTT CCTT CCTT	UIPE UIPE UIPE UIPE	EEEE EEEE EEEE EEEE	PEPE PEPE PEPE PEPE	IIEE IIEE IIEE IIEE
	CCTT CCTT CCTT CCTT	UIPE UIPE UIPE UIPE	EEEE EEEE EEEE EEEE	PEPE PEPE PEPE PEPE	IIEE IIEE IIEE IIEE
	CCTT CCTT CCTT CCTT	UIPE UIPE UIPE UIPE	EEEE EEEE EEEE EEEE	PEPE PEPE PEPE PEPE	IIEE IIEE IIEE IIEE
	CCTT CCTT CCTT CCTT	UIPE UIPE UIPE UIPE	EEEE EEEE EEEE EEEE	PEPE PEPE PEPE PEPE	IIEE IIEE IIEE IIEE
	CCTT CCTT CCTT CCTT	UIPE UIPE UIPE UIPE	EEEE EEEE EEEE EEEE	PEPE PEPE PEPE PEPE	IIEE IIEE IIEE IIEE
	CCTT CCTT CCTT CCTT	UIPE UIPE UIPE UIPE	EEEE EEEE EEEE EEEE	PEPE PEPE PEPE PEPE	IIEE IIEE IIEE IIEE
	CCTT CCTT CCTT CCTT	UIPE UIPE UIPE UIPE	EEEE EEEE EEEE EEEE	PEPE PEPE PEPE PEPE	IIEE IIEE IIEE IIEE
	CCTT CCTT CCTT CCTT	UIPE UIPE UIPE UIPE	EEEE EEEE EEEE EEEE	PEPE PEPE PEPE PEPE	IIEE IIEE IIEE IIEE
	CCTT CCTT CCTT CCTT	UIPE UIPE UIPE UIPE	EEEE EEEE EEEE EEEE	PEPE PEPE PEPE PEPE	IIEE IIEE IIEE IIEE
	CCTT CCTT CCTT CCTT	UIPE UIPE UIPE UIPE	EEEE EEEE EEEE EEEE	PEPE PEPE PEPE PEPE	IIEE IIEE IIEE IIEE
	CCTT CCTT CCTT CCTT	UIPE UIPE UIPE UIPE	EEEE EEEE EEEE EEEE	PEPE PEPE PEPE PEPE	IIEE IIEE IIEE IIEE
	CCTT CCTT CCTT CCTT	UIPE UIPE UIPE UIPE	EEEE EEEE EEEE EEEE	PEPE PEPE PEPE PEPE	IIEE IIEE IIEE IIEE
&	**CCTT FFNN CCCC FFFF**	**UIPE UUPP UIUI UUUU**	**EEEE PPPP IIII UUUU**	**PEPE PPPP UIUI UUUU**	**IIEE UUPP IIII UUUU**
	CCTT FFNN CCCC FFFF	**UIPE UUPP UIUI UUUU**	**EEEE PPPP IIII UUUU**	**PEPE PPPP UIUI UUUU**	**IIEE UUPP IIII UUUU**
	CCTT FFNN CCCC FFFF	**UIPE UUPP UIUI UUUU**	**EEEE PPPP IIII UUUU**	**PEPE PPPP UIUI UUUU**	**IIEE UUPP IIII UUUU**
	CCTT FFNN CCCC FFFF	**UIPE UUPP UIUI UUUU**	**EEEE PPPP IIII UUUU**	**PEPE PPPP UIUI UUUU**	**IIEE UUPP IIII UUUU**
	CCTT FFNN CCCC FFFF	**UIPE UUPP UIUI UUUU**	**EEEE PPPP IIII UUUU**	**PEPE PPPP UIUI UUUU**	**IIEE UUPP IIII UUUU**
	CCTT FFNN CCCC FFFF	**UIPE UUPP UIUI UUUU**	**EEEE PPPP IIII UUUU**	**PEPE PPPP UIUI UUUU**	**IIEE UUPP IIII UUUU**
	CCTT FFNN CCCC FFFF	**UIPE UUPP UIUI UUUU**	**EEEE PPPP IIII UUUU**	**PEPE PPPP UIUI UUUU**	**IIEE UUPP IIII UUUU**
	CCTT FFNN CCCC FFFF	**UIPE UUPP UIUI UUUU**	**EEEE PPPP IIII UUUU**	**PEPE PPPP UIUI UUUU**	**IIEE UUPP IIII UUUU**
	CCTT FFNN CCCC FFFF	**UIPE UUPP UIUI UUUU**	**EEEE PPPP IIII UUUU**	**PEPE PPPP UIUI UUUU**	**IIEE UUPP IIII UUUU**
	CCTT FFNN CCCC FFFF	**UIPE UUPP UIUI UUUU**	**EEEE PPPP IIII UUUU**	**PEPE PPPP UIUI UUUU**	**IIEE UUPP IIII UUUU**
	CCTT FFNN CCCC FFFF	**UIPE UUPP UIUI UUUU**	**EEEE PPPP IIII UUUU**	**PEPE PPPP UIUI UUUU**	**IIEE UUPP IIII UUUU**
	CCTT FFNN CCCC FFFF	**UIPE UUPP UIUI UUUU**	**EEEE PPPP IIII UUUU**	**PEPE PPPP UIUI UUUU**	**IIEE UUPP IIII UUUU**
	CCTT FFNN CCCC FFFF	**UIPE UUPP UIUI UUUU**	**EEEE PPPP IIII UUUU**	**PEPE PPPP UIUI UUUU**	**IIEE UUPP IIII UUUU**
	CCTT FFNN CCCC FFFF	**UIPE UUPP UIUI UUUU**	**EEEE PPPP IIII UUUU**	**PEPE PPPP UIUI UUUU**	**IIEE UUPP IIII UUUU**
~B	TTTT NNNN CCCC FFFF	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU
	TTTT NNNN CCCC FFFF	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU
	TTTT NNNN CCCC FFFF	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU
	TTTT NNNN CCCC FFFF	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU
	TTTT NNNN CCCC FFFF	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU
	TTTT NNNN CCCC FFFF	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU
	TTTT NNNN CCCC FFFF	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU
	TTTT NNNN CCCC FFFF	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU
	TTTT NNNN CCCC FFFF	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU
	TTTT NNNN CCCC FFFF	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU
	TTTT NNNN CCCC FFFF	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU
	TTTT NNNN CCCC FFFF	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU
	TTTT NNNN CCCC FFFF	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU	EEEE PPPP IIII UUUU

&	**NNFF**	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
	NNFF	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
	NNFF	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
	NNFF	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
	NNFF	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
	NNFF	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
	NNFF	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
	NNFF	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
	NNFF	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
	NNFF	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
	NNFF	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
	NNFF	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
	NNFF	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
	NNFF	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
	NNFF	**NNFF**	**NNFF**	**NNFF**	**EPIU**	**EPIU**	**EPIU**	**EPIU**	**UUUU**	**UUUU**	**UUUU**	**UUUU**	**IUIU**	**IUIU**	**IUIU**	**IUIU**	**PPUU**	**PPUU**	**PPUU**	**PPUU**
# (~A)	NNFF	NNFF	NNFF	NNFF	EPIU	EPIU	EPIU	EPIU	UUUU	UUUU	UUUU	UUUU	IUIU	IUIU	IUIU	IUIU	PPUU	PPUU	PPUU	PPUU
	NNFF	NNFF	NNFF	NNFF	EPIU	EPIU	EPIU	EPIU	UUUU	UUUU	UUUU	UUUU	IUIU	IUIU	IUIU	IUIU	PPUU	PPUU	PPUU	PPUU
	NNFF	NNFF	NNFF	NNFF	EPIU	EPIU	EPIU	EPIU	UUUU	UUUU	UUUU	UUUU	IUIU	IUIU	IUIU	IUIU	PPUU	PPUU	PPUU	PPUU
	NNFF	NNFF	NNFF	NNFF	EPIU	EPIU	EPIU	EPIU	UUUU	UUUU	UUUU	UUUU	IUIU	IUIU	IUIU	IUIU	PPUU	PPUU	PPUU	PPUU
	NNFF	NNFF	NNFF	NNFF	EPIU	EPIU	EPIU	EPIU	UUUU	UUUU	UUUU	UUUU	IUIU	IUIU	IUIU	IUIU	PPUU	PPUU	PPUU	PPUU
	NNFF	NNFF	NNFF	NNFF	EPIU	EPIU	EPIU	EPIU	UUUU	UUUU	UUUU	UUUU	IUIU	IUIU	IUIU	IUIU	PPUU	PPUU	PPUU	PPUU
	NNFF	NNFF	NNFF	NNFF	EPIU	EPIU	EPIU	EPIU	UUUU	UUUU	UUUU	UUUU	IUIU	IUIU	IUIU	IUIU	PPUU	PPUU	PPUU	PPUU
	NNFF	NNFF	NNFF	NNFF	EPIU	EPIU	EPIU	EPIU	UUUU	UUUU	UUUU	UUUU	IUIU	IUIU	IUIU	IUIU	PPUU	PPUU	PPUU	PPUU
	NNFF	NNFF	NNFF	NNFF	EPIU	EPIU	EPIU	EPIU	UUUU	UUUU	UUUU	UUUU	IUIU	IUIU	IUIU	IUIU	PPUU	PPUU	PPUU	PPUU
	NNFF	NNFF	NNFF	NNFF	EPIU	EPIU	EPIU	EPIU	UUUU	UUUU	UUUU	UUUU	IUIU	IUIU	IUIU	IUIU	PPUU	PPUU	PPUU	PPUU
	NNFF	NNFF	NNFF	NNFF	EPIU	EPIU	EPIU	EPIU	UUUU	UUUU	UUUU	UUUU	IUIU	IUIU	IUIU	IUIU	PPUU	PPUU	PPUU	PPUU
	NNFF	NNFF	NNFF	NNFF	EPIU	EPIU	EPIU	EPIU	UUUU	UUUU	UUUU	UUUU	IUIU	IUIU	IUIU	IUIU	PPUU	PPUU	PPUU	PPUU
	NNFF	NNFF	NNFF	NNFF	EPIU	EPIU	EPIU	EPIU	UUUU	UUUU	UUUU	UUUU	IUIU	IUIU	IUIU	IUIU	PPUU	PPUU	PPUU	PPUU
	NNFF	NNFF	NNFF	NNFF	EPIU	EPIU	EPIU	EPIU	UUUU	UUUU	UUUU	UUUU	IUIU	IUIU	IUIU	IUIU	PPUU	PPUU	PPUU	PPUU
~A	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU
	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU
	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU
	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU
	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU
	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU
	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU
	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU
	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU
	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU
	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU
	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU
	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU
	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU
	TNCF	TNCF	TNCF	TNCF	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU	EPIU