$\boxed{\sigma \mapsto \sigma'}$

Machine takes one step from state σ to state σ'

$$
\begin{array}{rcl}
s;\rho \triangleright x & \mapsto & s;\rho' \triangleleft V \quad (\rho[x] = (V,\rho')) \\
s;\rho \triangleright \texttt{(con}\ tn\ cn\texttt{)} & \mapsto & s;\rho \triangleleft \texttt{(con}\ tn\ cn\texttt{)} \\
s;\rho \triangleright \texttt{(lam}\ x\ M\texttt{)} & \mapsto & s;\rho \triangleleft \texttt{(lam}\ x\ M\texttt{)} \\
s;\rho \triangleright \texttt{(delay}\ M\texttt{)} & \mapsto & s;\rho \triangleleft \texttt{(delay}\ M\texttt{)} \\
s;\rho \triangleright \texttt{(force}\ M\texttt{)} & \mapsto & s, \texttt{(force \_)};\rho \triangleright M \\
s;\rho \triangleright \texttt{[}M\ N\texttt{]} & \mapsto & s, \texttt{[\_}\ N\texttt{]};\rho \triangleright M \\
s;\rho \triangleright \texttt{(builtin}\ bn\texttt{)} & \mapsto & s;\rho \triangleright M \quad (bn\ \textit{computes to}\ M) \\
s;\rho \triangleright \texttt{(builtin}\ bn\ M\overline{M}\texttt{)} & \mapsto & s, (\texttt{(builtin}\ bn\ \texttt{\_}\overline{M}\texttt{)},\rho);\rho \triangleright M \\
s;\rho \triangleright \texttt{(error)} & \mapsto & \blacklozenge \\
\\
\cdot \triangleleft V & \mapsto & \square(V,\rho) \\
s, \texttt{[\_}\ N\texttt{]};\rho \triangleleft V & \mapsto & s, \texttt{[}V\ \texttt{\_]};\rho \triangleright N \\
s, \texttt{[((lam}\ x\ A\ M\texttt{)},\rho')\ \texttt{\_]};\rho \triangleleft V & \mapsto & s;\rho'[x \mapsto (V,\rho)] \triangleright M \\
s, \texttt{(force \_)};\rho \triangleleft \texttt{(delay}\ M\texttt{)} & \mapsto & s;\rho \triangleright M \\
s, (\texttt{(builtin}\ bn\ \overline{C}\ \texttt{\_}\ M\overline{M}\texttt{)},\rho');\rho \triangleleft V & \mapsto & s, (\texttt{(builtin}\ bn\ \overline{C}(V,\rho)\ \texttt{\_}\overline{M}\texttt{)},\rho');\rho' \triangleright M \\
s, (\texttt{(builtin}\ bn\ \overline{C}\ \texttt{\_)},\rho');\rho \triangleleft V & \mapsto & s;\rho' \triangleright M \quad (bn\ \textit{computes on}\ \overline{C}(V,\rho)\ \textit{to}\ M)
\end{array}
$$

(c) CEK machine transitions for type-erased Plutus Core

Figure 23 (Continued): A CEK machine for type-erased Plutus Core