Problem chi

$X_I = X \setminus \{ k \mid k \in I \}$, $R_{n+1} = R_0, \varphi_0, \ldots, \varphi_n$

$$\dfrac{\dfrac{\dfrac{R_0,\, \tilde{p}_6,\, p_2 \vdash_{\mathrm{c}} p_1}{R_0, X_{\{0,3\}}, \tilde{p}_6, p_2 \Rightarrow p_1} \quad \dfrac{\dfrac{R_1,\, \tilde{p}_{10},\, p_1 \vdash_{\mathrm{c}} p_2}{R_1, X_{\{0,5\}}, \tilde{p}_{10}, p_1 \Rightarrow p_2} \quad \dfrac{R_2,\, p_3 \vdash_{\mathrm{c}} p_2}{R_2, X_{\{0\}}, p_3 \Rightarrow p_2}}{R_1, X_{\{0\}}, p_3 \Rightarrow p_2}\,\lambda_5}{R_0, X_{\{0\}}, p_3 \Rightarrow p_2}\,\lambda_3 \quad \dfrac{\dfrac{R_3,\, p_3 \vdash_{\mathrm{c}} p_1}{R_3, X_{\{1\}}, p_3 \Rightarrow p_1} \quad \dfrac{\dfrac{\dfrac{R_4,\, \tilde{p}_1,\, p_1 \vdash_{\mathrm{c}} p_3}{R_4, X_{\{2,4\}}, \tilde{p}_1, p_1 \Rightarrow p_3} \quad \dfrac{R_5,\, p_2 \vdash_{\mathrm{c}} p_3}{R_5, X_{\{2\}}, p_2 \Rightarrow p_3}}{R_4, X_{\{2\}}, p_2 \Rightarrow p_3}\,\lambda_4 \quad \dfrac{R_6 \vdash_{\mathrm{c}} \tilde{g}}{R_6, X \Rightarrow \tilde{g}}}{R_5, X \Rightarrow \tilde{g}}\,\lambda_2}{R_3, \varphi_4, X \Rightarrow \tilde{g}}\,\lambda_1}{R_2, \varphi_4, X \Rightarrow \tilde{g}}\,\lambda_0$$