```bash
#!/bin/bash
# ===================================================================
# KURO :: LIQUID GLASS ENGINE — Deploy Script
# Run from Termius after SFTP'ing files to /tmp/lg/
# ===================================================================

set -e
KURO="/var/www/kuro/ai-react"

echo "┌───────────────────────────────────────────┐"
echo "║  KURO :: LIQUID GLASS ENGINE — Deploying...  ║"
echo "└───────────────────────────────────────────┘"

# Backup current glass implementation
echo "[1/5] Backing up existing glass files..."
mkdir -p "$KURO/src/backup-pre-lg-$(date +%Y%m%d)"
for f in liquid-glass.css LiquidGlassEngine.jsx ThemeProvider.jsx; do
  [ -f "$KURO/src/$f" ] && cp "$KURO/src/$f" "$KURO/src/backup-pre-lg-$(date +%Y%
  [ -f "$KURO/src/components/$f" ] && cp "$KURO/src/components/$f" "$KURO/src/bac
done
echo "    ✓ Backups saved"

# Deploy CSS engine
echo "[2/5] Installing CSS material system..."
cp /tmp/lg/liquid-glass.css "$KURO/src/liquid-glass.css"
echo "    ✓ liquid-glass.css → src/"

# Deploy React provider
echo "[3/5] Installing React provider & components..."
cp /tmp/lg/LiquidGlassEngine.jsx "$KURO/src/components/LiquidGlassEngine.jsx"
echo "    ✓ LiquidGlassEngine.jsx → src/components/"

# Wire CSS import into main.jsx if not present
echo "[4/5] Wiring CSS import..."
if ! grep -q "liquid-glass.css" "$KURO/src/main.jsx" 2>/dev/null; then
  sed -i '1i import "./liquid-glass.css";' "$KURO/src/main.jsx"
  echo "    ✓ Added CSS import to main.jsx"
else
  echo "    ○ CSS import already present"
fi

# Build
echo "[5/5] Building frontend..."
cd "$KURO"
```

```
npm run build 2>&1 | tail -3
pm2 restart kuro-backend 2>/dev/null || echo "    ○ PM2 not running, skip restart

echo ""
echo "╔══════════════════════════════════════════╗"
echo "║  ✓ LIQUID GLASS ENGINE DEPLOYED          ║"
echo "╚══════════════════════════════════════════╝"
echo ""
echo "NEXT: Wire LiquidGlassProvider into App.jsx:"
echo ""
echo '  import { LiquidGlassProvider } from "./components/LiquidGlassEngine";'
echo '  import "./liquid-glass.css";'
echo ""
echo "  Wrap your root:"
echo '  <LiquidGlassProvider>'
echo '    <KuroDesktop />'
echo '  </LiquidGlassProvider>'
echo ""
echo "  Then use glass on any component:"
echo '  import { Glass, GlassToolbar, GlassWindow } from "./components/LiquidGlas
echo ""
echo '  <Glass variant="regular" shape="panel" animate>'
echo '    <p>Content here</p>'
echo '  </Glass>'
echo ""
echo "VARIANTS: regular | clear | tinted | frosted"
echo "SHAPES:   panel | pill | toolbar | dock | window | notification"
echo "HOOKS:    useScrollResponsive | useSpecularTilt | useMaterialization"
```