RITA AI Smart Contract Auditor Renewable Energy Token

0x10b9dd394467f2cfbc769e07e88dc7e2c41b0965

Detailed Security Audit

Critical Functions Check

Issue Description	Checking Status
Compiler errors	Passed
Race conditions and Reentrancy, Cross-function race conditions	High Risk
Possible delays in data delivery	Passed
Oracle calls	Passed
Front running	Passed
Timestamp dependence	Low Risk
Integer Overflow and Underflow	Low Risk
Dos with Revert	Low Risk
Dos with block gas limit	Low Risk
Methods execution permissions	Low Risk
Economy model of the contract	High Risk
The impact of the exchange rate on the logic	Passed
Private user data leaks	Passed
Malicious Event log	Passed
Scoping and Declarations	Passed
Uninitialized storage pointers	Passed
Arithmetic accuracy	Low Risk
Design Logic	Passed
Cross-function race conditions	Passed
Safe Open Zeppelin contracts implementation and usage	Passed
Fallback function security	Low Risk
Unsafe delegatecall usage	Passed
Unrestricted public functions	Passed
Potential infinite loops	Low Risk
High gas consumption operations	Low Risk
Unsafe send/transfer usage	Low Risk

Risky Functions Details

Function: reentrancy

Critical reentrancy vulnerability detected, risking multiple function calls during a single transaction

Function: timestamp

Potential timestamp dependence detected, risking manipulation of block timestamps for malicious behavior

Function: permissions

Potential insecure method execution permissions detected, risking unauthorized access

Function: economy

Critical economy model issue with fees (tax, liquidity, charity) detected, may lead to unexpected behavior or exploitation

Function: loops

Potential infinite loops detected, risking contract freezing or high gas costs

Function: gas

Potential high gas consumption operations detected, risking transaction failures or DoS attacks

Function: send/transfer

Potential unsafe send/transfer usage detected, risking reentrancy or fund loss

Function: send/transfer