

1 Name of Reporting Person / IRS Identification Number:
Advisory Research, Inc. / 36-2831881

2 Check the Appropriate Box if a Member of a Group (a) []
(See Instructions) (b) [X]

3 SEC Use Only

4 Citizenship or Place of Organization
Delaware

Number of	5	Sole Voting Power
Shares		5726421
Beneficially		
Owned By	6	Shared Voting Power
Each		0 Shares
Reporting	7	Sole Dispositive Power
Person		5726421
With	8	Shared Dispositive Power
		0 Shares

9 Aggregate Amount Beneficially Owned by Each Reporting Person
5726421

10 Check if the Aggregate Amount in Row (9) Excludes Certain
Shares [] (See Instructions)

11 Percent of Class Represented by Amount in Row (9)
6.762%

12 Type of Reporting Person
IA

Item 1 (a) Name of Issuer: USEC INC
Item 1 (b) Name of Issuer's Principal Executive Offices:
2 DEMOCRACY CENTER
6903 ROCKLEDGE DRIVE
BETHESDA, MD 20817

Item 2 (a) Person Filing - Advisory Research, Inc.

Item 2 (b) Address - 180 North Stetson St., Suite 5500
Chicago, IL 60601

Item 2 (c) Citizenship - Advisory Research, Inc. is a
Delaware Corporation

Item 2 (d) Title of Class of Securities - Common

Item 2 (e) CUSIP Number - 90333E108

Item 3 If this statement is filed pursuant to Rules
13d-1(b) or 13d-2(b), check whether the person
filing is a:

- (a) Broker or Dealer registered under Section 15 of the Act
- (b) Bank as defined in Section 3(a)(6) of the Act
- (c) Insurance Company as defined in Section 3(a)(19) of the Act
- (d) Investment Company registered under Section 8 of the Investment Company Act
- (e) Investment Advisor in accordance with section 240.13d-1(b)(1)(ii)(E)
- (f) Employee Benefit Plan or Endowment Fund in accordance with section 240.13d-1(b)(1)(ii)(F)
- (g) Parent Holding Company or Control Person in accordance with section 13d-1(b)(1)(ii)(G)
- (h) A savings association as defined in section 3(b) of the Federal Deposit Insurance Act
- (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940

Item 4 Ownership

- (a) Amount Beneficially Owned:
Advisory Research, Inc. 5726421 Shares
- (b) Percent of Class 6.762%
- (c) Number of shares as to which reporting person has:
 - (i) Sole Voting Power 5726421 Shares
 - (ii) Shared Voting Power 0 Shares
 - (iii) Sole Dispositive Power 5726421 Shares
 - (iv) Shared Dispositive Power 0 Shares

Item 5 Ownership of Five Percent or Less of a Class:
If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following

Item 6 Ownership of More than Five Percent on Behalf of Another Person: Not Applicable

Item 7 Identification and Classification of the Subsidiary Which Acquired the Security being Reported on by the Parent Holding Company: Not Applicable

Item 8 Identification and Classification if Members of the Group: Not Applicable

Item 9 Notice of Dissolution of Group: Not Applicable

Item 10 Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of such securities and were not acquired and are

not held in connection with or as a participant
in any transaction having such purposes or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and
belief, I certify that the information set forth in this
statement is true, complete and correct.

02/10/2005

Date

/s/ Brien M. O'Brien

Signature

Brien M. O'Brien, Chairman

Name/Title