FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person [*] MELLOR JAMES R						2. Issuer Name and Ticker or Trading Symbol USEC INC [USU]									5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner			
(Last) (First) (Middle)					3. Date of Earliest Transaction (Month/Day/Year) 05/11/2010									Offic belo	er (give title w)	Othe	r (specify v)	
6903 ROCKLEDGE DRIVE					4. If Ai	4. If Amendment, Date of Original Filed (Month/Day/Year)									6. Individual or Joint/Group Filing (Check Applicable Line)			
(Street) BETHES	(Street) BETHESDA MD 20817														Form filed by One Reporting Person Form filed by More than One Reporting Person			
(City)	(St	ate) (Z	Zip)															
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																		
1. Title of Security (Instr. 3) Date (Month/Day						Execution Date,			3. Transaction Code (Instr. 8) 4. Securities Acquired Disposed Of (D) (Instr. and 5)					Secur	icially d	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)	
									Code	v	Amount	(/ (E	() or ()	Price	Report Trans		((1150.4)
Common Stock 05/11/2					2010	010			Α		28,30	2	A	\$ <mark>0</mark>	31	7,681(1)	D	
	Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																	
1. Title of Derivative Security (Instr. 3)	rivative Conversion Date Execution I curity or Exercise (Month/Day/Year) if any						n of		6. Date Exercisable and Expiration Date (Month/Day/Year)			7. Title and Amount of Securities Underlying Derivative Security (Instr 3 and 4)		tr.	3. Price of Derivative Security Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s (Instr. 4)	Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
					Code	v	(A)	(D)	Date Exercisab		Expiration Date	Title	or Num of Shar					

Explanation of Responses:

1. Includes 91,777 restricted shares and 144,904 restricted stock units issued pursuant to the Company's equity incentive plan.

Remarks:

Kerri R. Morey, Attorney-In-05/12/2010

** Signature of Reporting Person Date

Fact

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.