

# REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8001140461 DOC. DATE: 80/01/09 NOTARIZED: NO DOCKET #  
 FACIL: 50-316 Donald C. Cook Nuclear Power Plant, Unit 2, Indiana & 05000316  
 AUTH. NAME: AUTHOR AFFILIATION:  
 DOLAN, J.E. Indiana & Michigan Power Co.  
 RECIP. NAME: RECIPIENT AFFILIATION  
 DENTON, H.R. Office of Nuclear Reactor Regulation

SUBJECT: Discusses peaking factor limits in light of revised ECCS analysis. Peak factor limit administratively reduced to Valve of 1.99 from 2.11. Forwards revision to Tech Specs incorporating reduced limits.

DISTRIBUTION CODE: A039S COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 7 + 13  
 TITLE: Resp to Lesson Learn Task Force - Westinghouse

NOTES: SEND 3 CYS ALL MATL TO I & E.

ACTION:	RECIPIENT	COPIES		RECIPIENT	COPIES	
	ID CODE/NAME	LTR	ENCL		ID CODE/NAME	LTR
	10 BC ORB #1	1	1			
INTERNAL:	1 REG FILE	1	1	17 I & E	2	2
	19 TA/EDO	1	1	2 NRC PDR	1	1
	20 CORE PERF BR	1	1	21 ENG BR	1	1
	22 REAC SFTY BR	1	1	23 PLANT SYS BR	1	1
	24 EEB	1	1	25 EFLT TRT SYS	1	1
	3 LPDR	1	1	4 NSIC	1	1
	5 J OLSHINSKI	1	1	6 J KERRIGAN	1	1
	7 J BURDION	1	1	8 C WILLIS	1	1
	9 G IMBRU	1	1	J.T. TELFORD	2	2
	M FIELDS	1	1	N ANDERSON	1	1
	OELD	1	0	P O'REILLY	1	1
EXTERNAL:	26 ACRS	16	16			

JAN 15 1980

TOTAL NUMBER OF COPIES REQUIRED: LTR

50

47

ENCL

49

46

ECCS

GP

[illegible]

1970

# INDIANA & MICHIGAN ELECTRIC COMPANY

P. O. BOX 18  
BOWLING GREEN STATION  
NEW YORK, N. Y. 10004

January 9, 1980  
AEP:NRC:00322B

Donald C. Cook Nuclear Plant Unit No. 2  
Docket No. 50-316  
License No. DPR-74  
Subject: Peaking Factor Limits at Unit 2 in  
Light of Revised ECCS Analysis

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Denton:

As a result of the revised ECCS analysis performed for Donald C. Cook Nuclear Plant Unit 2 by Westinghouse Electric Corporation using their February 1978 evaluation model and incorporating into the analysis the potential impact of the clad behavior data presented in draft NUREG-0630, we have discovered that our current limit on  $F_Q$  of 2.11 should be reduced to a value of 1.99. A discussion of the basis for this change is enclosed as Attachment A. Upon the discovery of this reduction we informed the NRC staff and stated in our letter of January 8, 1980 (AEP:NRC:00322A) that we would administratively limit the  $F_Q$  of Unit 2 to 1.99. Further, until the NRC staff approves the Technical Specification changes discussed below, we will not operate Unit 2 in any mode in which the new  $F_Q$  limits apply.

The  $F_Q$  limit affects numerous Technical Specifications. In our letter of November 2, 1979 (AEP:NRC:00297), we submitted Technical Specification change requests related to  $F_Q$  limits along with the required license amendment fee. At that time, our motivation was to bring the actual Technical Specifications in line with the administrative limits which resulted from the discovery of a calculational error in Westinghouse's October 1975 evaluation model and subsequent issuance of the NRC order. In light of the latest

A039  
5/1

8001140

461

2000 1000 500 250 125 62.5 31.25 15.625 7.8125 3.90625 1.953125 0.9765625 0.48828125 0.244140625 0.1220703125 0.06103515625 0.030517578125 0.0152587890625 0.00762939453125 0.003814697265625 0.0019073486328125 0.00095367431640625 0.000476837158203125 0.0002384185791015625 0.00011920928955078125 0.000059604644775390625 0.0000298023223876953125 0.00001490116119384765625 0.000007450580596923828125 0.0000037252902984619140625 0.00000186264514923095703125 0.000000931322574615478515625 0.0000004656612873077392578125 0.00000023283064365386962890625 0.000000116415321826934814453125 0.0000000582076609134674072265625 0.00000002910383045673370361328125 0.000000014551915228366851806640625 0.0000000072759576141834259033203125 0.00000000363797880709171295166015625 0.000000001818989403545856475830078125 0.0000000009094947017729282379150390625 0.00000000045474735088646411895751953125 0.000000000227373675443232059478759765625 0.0000000001136868377216160297393798828125 0.00000000005684341886080801486968994140625 0.000000000028421709430404007434844970703125 0.0000000000142108547152020037174224853515625 0.00000000000710542735760100185871124267578125 0.000000000003552713678800500929355621337890625 0.0000000000017763568394002504646778106689453125 0.00000000000088817841970012523233890533447265625 0.000000000000444089209850062616169452667236328125 0.0000000000002220446049250313080847263336181640625 0.00000000000011102230246251565404236316680908203125 0.000000000000055511151231257827021181583404541015625 0.0000000000000277555756156289135105907917022705078125 0.00000000000001387778780781445675529539585113525390625 0.000000000000006938893903907227877647697925567626953125 0.0000000000000034694469519536139388238489627838134765625 0.00000000000000173472347597680696941192448139190673828125 0.000000000000000867361737988403484705962240695953369140625 0.0000000000000004336808689942017423529811203479766845703125 0.00000000000000021684043449710087117649056017398834228515625 0.000000000000000108420217248550435588245280086994171142578125 0.0000000000000000542101086242752177941226400434970855712890625 0.00000000000000002710505431213760889706132002174854278564453125 0.000000000000000013552527156068804448530660010874271392822265625 0.0000000000000000067762635780344022242653300054371356964111328125 0.00000000000000000338813178901720111213266500271856784820556640625 0.000000000000000001694065894508600556066332501359283924102783203125 0.0000000000000000008470329472543002780331662506796419620513916015625 0.00000000000000000042351647362715013901658312533982098102569580078125 0.000000000000000000211758236813575069508291562669910490512847900390625 0.0000000000000000001058791184067875347541457813349552452564239501953125 0.00000000000000000005293955920339376737707289066747762262821197509765625 0.000000000000000000026469779601696883688536445333738811314105987548828125 0.0000000000000000000132348898008484418442682226668694056570529937744140625 0.00000000000000000000661744490042422092213411133343470282852649688720703125 0.000000000000000000003308722450212110461067055666717351414263248443603515625 0.0000000000000000000016543612251060552305335278333586757071316242218017578125 0.00000000000000000000082718061255302761526676391667933785356581211090087890625 0.000000000000000000000413590306276513807633381958339668926782906054450439453125 0.0000000000000000000002067951531382569038166909791698344633914530272252197265625 0.00000000000000000000010339757656912845190834548958491723169572651361260986328125 0.000000000000000000000051698788284564225954172744792458615847863256806304931640625 0.0000000000000000000000258493941422821129770863723962293079239316284031524658203125 0.00000000000000000000001292469707114105648854318619811465396196581420157623291015625 0.000000000000000000000006462348535570528244271593099057326980982907100788116455078125 0.0000000000000000000000032311742677852641221357965495286634904914535503940582275390625 0.00000000000000000000000161558713389263206106789827476433174524572677519702911376953125 0.000000000000000000000000807793566946316030533949137382165872622863387598514556884765625 0.0000000000000000000000004038967834731580152669745686910829363114316937992572784423828125 0.00000000000000000000000020194839173657900763348728434554146815571584689962863922119140625 0.000000000000000000000000100974195868289503816743642172770734077857923449814319610595703125 0.0000000000000000000000000504870979341447519083718210863853670389289617249071598052978515625 0.00000000000000000000000002524354896707237595418591054319268351946448086245357990264892578125 0.000000000000000000000000012621774483536187977092955271596341759732240431226789951324462890625 0.0000000000000000000000000063108872417680939885464776357981708798661202156133949756622314453125 0.00000000000000000000000000315544362088404699427323881789908543993306010780669748783111572265625 0.000000000000000000000000001577721810442023497136619408949542719966530053903348743915557861328125 0.0000000000000000000000000007888609052210117485683097044747713599832650269516743719577789306640625 0.00000000000000000000000000039443045261050587428415485223738567999163251347583718597888946533203125 0.000000000000000000000000000197215226305252937142077426118692839995816256737918592989444732666015625 0.0000000000000000000000000000986076131526264685710387130593464199979081283689592964944722368330078125 0.00000000000000000000000000004930380657631323428551935652967320999895406418447964824723611841650390625 0.000000000000000000000000000024651903288156617142759678264836604999477032092239824123618059208251953125 0.0000000000000000000000000000123259516440783085713798391324183024997385160461199120618090296041259765625 0.00000000000000000000000000000616297582203915428568991956620915124986925802305995603090451480206298828125 0.000000000000000000000000000003081487911019577142844959783104575624934629011529978015452257401031494140625 0.0000000000000000000000000000015407439555097885714224798915522878124673145057649890077261287005157470703125 0.00000000000000000000000000000077037197775489428571123994577614390623365725288249450036306435025787353515625 0.000000000000000000000000000000385185988877447142855619972888071953116828626441247250181532175128936767578125 0.0000000000000000000000000000001925929944387235714278099864440359765584143132206236250907660875644683837890625 0.00000000000000000000000000000009629649721936178571390499322220179877920715661031181250453304378223419168953125 0.000000000000000000000000000000048148248609680892856952496611100899389603578305155906250266521891117095844765625 0.0000000000000000000000000000000240741243048404464284762483055504496948017891525779531250133260455585479223828125 0.00000000000000000000000000000001203706215242022321423812415277522484740089457628897656250066630277927396119140625 0.000000000000000000000000000000006018531076210111607119062076387612423700447288144488281250033315139636980595703125 0.0000000000000000000000000000000030092655381050558035595310381938062118502236440722441406250016657698184902978515625 0.00000000000000000000000000000000150463276905252790177976551909690310592511182203612207031250008328490924514892578125 0.000000000000000000000000000000000752316384526263950889882759548451552962555911018061103515625000416445462262462890625 0.0000000000000000000000000000000003761581922631319754449413797742257764812779555090305517578125000208222731312311453125 0.00000000000000000000000000000000018807909613156598772247068988711288824063897775451527587890625000104111365611557265625 0.000000000000000000000000000000000094039548065782993861235344943556444120319488877257637939453125000052055682807786328125 0.00000000000000000000000000000000004701977403289149693061767247177822206015974443862881896972656250000260278414038931640625 0.000000000000000000000000000000000023509887016445748465308836235889111030079872219314409484863281250000130139207194658203125 0.00000000000000000000000000000000001175494350822287423265441811794455551503993610965720474243164062500000650696035973291015625 0.0000000000000000000000000000000000058774717541114371163272090589722777575199680548286023712158203125000003253480179866455515625 0.00000000000000000000000000000000000293873587705571855816360452948613887875998402741430118560791015625000001626740089933227778125 0.0000000000000000000000000000000000014693679385278592790818022647430694393799920137071505928039550781250000008133700449666138890625 0.0000000000000000000000000000000000007346839692639296395409011323715347196899960068535752964019775390625000000406685022483306944453125 0.000000000000000000000000000000000000367341984631964819770450566185767359844998003426787648200988769531250000002033425112416534722265625 0.00000000000000000000000000000000000018367099231598240988522528309288367992249900171339382410049438476562500000010167125562082686111328125 0.0000000000000000000000000000000000000918354961579912049426126415464418399612499500856694120502471923828125000000050835627810413430556640625 0.0000000000000000000000000000000000000459177480789956024713063207732209199806249750428347060251235961914062500000002541781139020671527783203125 0.000000000000000000000000000000000000022958874039497801235653160386610459990312487521417353012561798095703125000000012708905695103357638916015625 0.0000000000000000000000000000000000000114794370197489006178265801933052299951562437607086765062808990478515625000000063544528475516788194580078125 0.000000000000000000000000000000000000005739718509874450308913290096652614997578121880354338253140449523925781250000000317722642377583940972900390625 0.00000000000000000000000000000000000000286985925493722515445664504832630749878906094017716912657022476196289062500000001588613211887919704864501953125 0.0000000000000000000000000000000000000014349296274686125772283225241631537493945304700885845632851123809814453125000000007943066059439598524322509765625 0.000000000000000000000000000000000000000717464813734306288614161262081576874697265235044292281642556190490722656250000000039715330297197992621612548828125 0.00000000000000000000000000000000000000035873240686715314430708063104078843734863261752214614082127809524536132812500000000198576651485989963108062744140625 0.00000000000000000000000000000000000000017936620343357657215354031552039421867431630876107307041063904762268066406250000000009928832574299498155403137203125 0.00896831017167882860767701577601971093371581503780365352053195238113403320312500000000049644162871497490777015686015625 0.004484155085839414303838507888009855466857907518901826760265976190567016601562500000000248220814357487453885078430078125 0.00224207754291970715191925394400492773342895375944509138013298809528350830078125000000001241104071787437269425392150390625 0.0011210387714598535759596269720024638667144768797225456900664940476417541503906250000000006205520358937186347126960751953125 0.000560519385729926787979813486001231933357238439861272845033247023820877075195312500000000031027601794685931735634803759765625 0.0002802596928649633939899067430006159666786192199306364225166235119104385375976562500000000155138008973429658678174018798828125 0.000140129846432481696994953371500307983339309609965318211258311755955219268798828125000000000775694042367148293390870093994140625 0.007006492321624084849747668575015399166965480498265910562915587797760963439941406250000000003878470211835741466954350469970703125 0.00350324616081204242487383428750769958348274024913295528145779389888048171997070312500000000019392351059178707334771752349853515625 0.001751623080406021212436917143750389791741370124566477640728896949440240859985351562500000000096961755295893536673858761749267578125 0.00087581154020301060621845857187519489587068506228323882036444487472012204299267578125000000000484808776479467683369293808746337890625 0.0004379057701015053031092292859375974479353425311416194101822224373600610214963378906250000000002424043882397338416846469

Mr. Harold R. Denton, Director

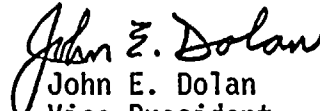
-2-

AEP:NRC:00322B

results, we wish to update the outstanding Technical Specification change requests to incorporate the  $F_0$  limit of 1.99. A detailed description of the changes involved are presented in Attachment B to this letter.

Since the change requests of interest have already been formally requested and paid for as a Class III License Amendment for Unit 2, payment of additional fees is deemed unwarranted.

Very truly yours,

  
John E. Dolan  
Vice President

JED:em

cc: R. C. Callen  
G. Charnoff  
R. W. Jurgensen  
R. S. Hunter  
D. V. Shaller -Bridgman .

Mr. Harold R. Denton, Director

-3-

AEP:NRC:00322B

bc: S. J. Milioti/J. I. Castresana/V. P. Manno  
J. G. Del Percio/K. J. Vehstedt  
H. L. Sobel/J. J. Weiss  
R. F. Hering/S. H. Steinhart/J. A. Kobyra  
R. F. Kroeger  
H. N. Scherer, Jr./S.H. Horowitz/J. M. Intrabartola  
E. A. Smarrella/V. VanderBurg-Bridgman  
J. F. Stietzel-Bridgman  
D. Wigginton-NRC  
Cook Plant Resident NRC Inspector  
DC-N-6015.1  
DC-N-6665.7  
AEP:NRC:00322  
AEP:NRC:00322A  
AEP:NRC:00322B

ATTACHMENT A  
TO  
AEP:NRC:00322B  
DONALD C. COOK NUCLEAR PLANT  
UNIT NO. 2  
DOCKET NO. 50-316  
LICENSE NO. DPR-74