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 11 **A. CABRAL BONNER, ESQ. SB# 247528**  
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19 ATTORNEYS FOR PLAINTIFFS

20 **UNITED STATES DISTRICT COURT**  
 21 **SOUTHERN DISTRICT OF CALIFORNIA**  
 22 **SAN DIEGO DIVISION**

23 LINDSEY R. COOPER, JASMINE  
 24 ALLEN, NELLIE ALLEN-LOGAN,  
 25 RHONDA ANBERT, ADAM ARMENTA ,  
 26 SUSAN ASH, JINKY M. A., Individually  
 27 And As The Administrator Of The Estate Of  
 28 CHARLIEMAGNE T. A., J. A. a Minor By  
 His Mother As Guardian Ad Litem JINKY  
 M. A., .J.C.A. a Minor By His Mother As  
 Guardian Ad Litem JINKY M. A., DANA  
 AUSTIN, RENAR AWA, JOSH BANE,  
 ARAMIS BARRIOS, TREVOR BECK,  
 MARKUS BEGAY, JORDAN BENOIT,  
 JAMI BESCHORNER, JORDAN  
 BETTENCOURT, BRETT, A. BINGHAM,

Case No.: 12-CV-3032-JLS-WMc  
 A CLASS ACTION COMPLAINT  
 Fed. Rule 23(a)

**THIRD AMENDED  
 COMPLAINT FOR DAMAGES**  
 1. NEGLIGENCE  
 2. STRICT LIABILITY FOR  
 MANUFACTURING DEFECT  
 3. STRICT LIABILITY FOR  
 DESIGN DEFECT  
 4. STRICT LIABILITY FOR  
 ULTRAHAZARDOUS  
 ACTIVITIES  
 5. NEGLIGENCE PER SE: RES  
 IPSA LOQUITUR  
 6. PRESUMPTION OF  
 NEGLIGENCE PER SE

1 CHRIS BITTNER, GUNNAR BORTHICK,  
 2 KENNETH CLEO BOSWELL, JAMES P.  
 3 BOWEN, MATTHEW BRADLEY,  
 4 NICOLAS BREWTON, NICOLAUS  
 5 BROOKS, RYAN S. BROWN, CASEY  
 6 BRUCKLACHER, GERARDO BRUING,  
 7 REBECCA BRUNET, ROBIN  
 8 CALCATERRA, NATHAN CANCHE,  
 9 ROBBY CANLAS, ANTHONY CARLISI,  
 10 COURTNEY CARMICHAEL, MATTHEW  
 11 CARTWRIGHT, WAYNE CASSAR,  
 12 FABIAN CERVANTES, MELVIN A.  
 13 CHAMBERLAIN, TERANCE CHAPMAN,  
 14 WILLIAM CHAPMAN JR., ANNMARIE  
 15 CHESSARI, DAVID CHITWOOD,  
 16 GEORGE COBB, LORI LYNN CODY ,  
 17 KEONDICE W COOK, ANGELA.  
 18 CRABTREE, NATHAN CRISWELL,  
 19 CHAD CROFT, BRIAN CROSS,  
 20 NICOLAS CROUCH, THOMAS  
 21 CULBERSON, VICENT CURCI, HONDA  
 22 DAGAN, JAMES DARNELL, JANELLE  
 23 DARNELL, JASON DASILVA, JOHN  
 24 DAVIS, MARK DECASA, NICHOLE M.  
 25 DECATUR, MARTIN DELGARDILLO,  
 26 TINA DIBERNARDO, BRANDON  
 27 DOCKERY, J. D., A MINOR BY HIS  
 28 FATHER AS GUARDIAN AD LITEM  
 JEREMY D., JEREMY D., CHRISTIAN  
 DOERR, IAN W. DOVE, JESSE DUNN,  
 CHRISTINA DUVALL, CHRISTIAN JOY  
 NAGUI EBUENG, PAUL ENCINIAS,  
 MAURICE ENIS, ANGEL ESCRIBANO,  
 SETH ESLIN, NICHOLAS J. FELLER,  
 KYLE E. FELT, TERI FORZA, JASON  
 TROY FRIEL, JOEL FUDGE, PAUL  
 GABBY, SHANE GALLAGHER,  
 ANTHONY GARCIA, ZACH GARNER,  
 JENNIFER GUANA, A. G., AN INFANT  
 BY HER MOTHER AS GUARDIAN AD

- 7. SURVIVAL ACTION--  
WRONGFUL DEATH  
(Theodore H.)
  - 8. WRONGFUL DEATH  
(Theodore H.)
  - 9. SURVIVAL ACTION--  
WRONGFUL DEATH  
(CHARLIEMAGNE T. A.)
  - 10. WRONGFUL DEATH  
(CHARLIEMAGNE T. A.)
  - 11. LOSS OF CONSORTIUM
- JURY TRIAL DEMANDED**

1 LITEM, KIM G., KIM G., OSCAR  
2 GONZALEZ, JOHN OLIVER GOOCH IV,  
3 JUDY GOODWIN, KATE GRACE,  
4 DAVID HAHN, DANIEL E. HAIR,  
5 ANDREW HAJNY, ROBERT  
6 HAREWOOD, DANIEL PATRICK  
7 HARREN, JOSHUA HARRIGAN , CHAD  
8 HARRIS, ROBERT C. HARTAGE,  
9 TIFFANY HARTMAN, NICHOLAS  
10 HELMSTADT, ASHTON HEMPHILL,  
11 JASON DAVID HENRY , ERIN  
12 HERRING, CORA E. HILL, M. H. a Minor  
13 By Allison D. Eyring Her Mother As  
14 Guardian Ad Litem, THE ESTATE OF  
15 THEODORE H., By Manuel Leslie, As The  
16 Administrator Of The Estate Of Theodore  
17 H., CHAD HOLT, NEIL HOPKINS,  
18 DYLAN IMGRAM, NICK INCA,  
19 JEDIDIAH IRONS, GERARDO IRVING,  
20 BLAKE ISAACS, DARIUS JACKSON,  
21 JAMES JACKSON, JESSICA JACKSON,  
22 CHRISTIAN A. JESSUP, JARRET  
23 BRADY JOHNSTON, WILLIAM JONES,  
24 WINSTON JONES, LEON JULIAN,  
25 CHARLES D. KAISER, TOOMER  
26 KANISHA, DANIEL KREGSTEIN,  
27 ADAM WERNER KRUTZLER,  
28 ZACKARY KUBE, SHANE M.  
LANGNES, DANIEL LAWVIER,  
ROBERT LEHRMAN, JULIAN LEON,  
JOANNA ILOILO, MARY LOKKA,  
NICOLE LOOK FANG, ALYSSA LOPEZ,  
ZACKERY LOUVERS , CHRISTOPHER  
LOWE , ALEJANDRO LUSK, CORA  
MAE, DAVID MALONE, BILLY  
MARKHAM, ALEX MARTIN, ALFRED  
MCALLISTER, DIANNA MCCANTS,  
THOMAS MCCANTS, CHENEIL  
MCCARTER, TYLER MCDONALD,  
PETINA MCINTOSH, ANDREW MEADE,

THIRD AMENDED COMPLAINT

12-CV-3032-JLS-WMc

1 JONATHAN MEDINA (FORMERLY  
2 INCLUDED AS JOSEPH MEDINA), ERIK  
3 MEMBRILA , RYAN MENENDEZ,  
4 MICHAEL MESIGH, JENNIFER MICKE,  
5 ROBERT M. MILLER, ADAM WERNER  
6 MINTZ, SAMY MOHANIE, JOEL  
7 MONSALUD, LETICIA MORALES,  
8 KEVIN MORRIS, COLIN MORRISON,  
9 MALLORY K. MORROW, TIMOTHY  
10 MUIS, WILLIAM NETHERTON, JON  
11 NEUMANN, MARK NEWMAN,  
12 MICHELLE ODEN, DANIEL OLSEN,  
13 MIKE TISOY ORMAN, CHRISTOPHER  
14 PETERSON, MATTHEW PETERSON,  
15 ALYSSA PETTERWAY, NATHAN  
16 PIEKUTOSKI, JAIME LEIGH PLYM,  
17 KEITH POTTRATZ, DANIEL PRETTO,  
18 DONALD RAIRIGH, ASHLEY  
19 RAMIREZ, TYLER RAY RANDRUP,  
20 CHRISTOPHER RICKARD, ANDREW  
21 RIVERA, SUSAN RODRIQUEZ,  
22 BRANDEN RUCKER, W. RUSHBY,  
23 ERICA RYAN, DAVID SANCHEZ, DANE  
24 SANTO, DAISY M. SARSLOW, K. S., AN  
25 INFANT BY HIS FATHER AS  
26 GUARDIAN AD LITEM, MICHAEL L. S.,  
27 MICHAEL L. S., JOHN SEELBACH,  
28 ROBERT SEELIGMAN, BENITO G  
SERENTAS JR, KELLI SERIO ,  
CHRISTOPHER SHAMRELL, MICHAEL  
B. SHANNON, STEVEN RAY SIMMONS,  
RYAN SIVELS, JOSHUA C. SMILEY,  
AKEEM SMITH, BRANDON SMITH,  
JUSTIN SPENCER, ALAN SPURLING,  
FRANCES FISTER STOGA, JAMES  
SUTTON, BYRON SY, KELLY  
TANNEHILL, NIGEL THOMPSON,  
CHAD THORTON, MICHAEL TIMKO,  
ANGEL TORRES, PATRICIA  
TOTEMEIER, JAMES TRICE, DARREL

THIRD AMENDED COMPLAINT

12-CV-3032-JLS-WMc

1 USRY, MARK VALDEZ, OSVALDO  
2 VERA, KAILEE VICTRUM, LOUIE  
3 VIERNES, ANDREW VODOPIJA,  
4 ANDREW VROOMAN, SKYLER  
5 STEVEN WARNOCK, TAWNY  
6 WATSON, TIMOTHY J. WENDAL, IAN  
7 LEE WHEATON, EDWARD JOSEPH  
8 WICKLE , CAROLYN WHITE, TIM  
9 WHITE, ELOI WHITEMAN, PATRICK  
10 WIGHT, KRISTIAN WILLIAM, TIM  
11 WOELKY, JUSTIN WOMMACK,  
12 RONALD WRIGHT, KIOCHI  
13 YAMAZAKI, CHAD YARBROUGH,  
14 CHARLES YARRIS, ANTHONY J.  
15 YOVANOVIC, JONATHAN ZAVITZ,  
16 WILLIAM J. ZELLER, MICHAEL  
17 ZITELLA, , On Behalf Of Themselves And  
18 Others Similarly Situated,

19 Plaintiffs,

20 vs.

21 TOKYO ELECTRIC POWER COMPANY,  
22 INC. aka TEPCO, GENERAL ELECTRIC,  
23 EBASCO, TOSHIBA, HITACHI and Does  
24 5 through 200, inclusive

25 Defendants

26 PLAINTIFFS, by their attorneys, PAUL C. GARNER, ESQ. and CHARLES  
27 A. BONNER ESQ., as and for their Third Amended Complaint, respectfully  
28 allege, upon information and belief, on behalf of themselves and others similarly  
situated, as follows:

At all relevant times, more than 70,000 CLASS PLAINTIFFS were  
members of the armed forces, their dependents, and support personnel, who served  
in a variety of capacities, and who are and were, at all times mentioned, citizens of  
the United States of America.

1 One or more members of PLAINTIFFS' CLASS may sue as representative  
2 parties on behalf of the class because all the following requirements are met: (1)  
3 the class is so numerous that joinder of all members is impracticable, (2) there are  
4 questions of law or fact common to the class, (3) the claims or defenses of the  
5 representative parties are typical of the claims or defenses of the class, and (4) the  
6 representative parties will fairly and adequately protect the interests of the class.

### 7 **JURISDICTION**

8 1. The jurisdiction of this Court over the subject matter in this action is  
9 predicated upon Diversity Jurisdiction, 28 U.S.C. §1332. The amount in  
10 controversy exceeds \$75,000, exclusive of interest and costs.<sup>1</sup> (2) The district  
11 courts shall have original jurisdiction of any civil action in which the matter in  
12 controversy exceeds the sum or value of \$5,000,000, exclusive of interest and  
13 costs, and is a class action in which-(A) any member of a class of plaintiffs is a  
14 citizen of a State different from any defendant;(B) any member of a class of  
15 plaintiffs is a foreign state or a citizen or subject of a foreign state and any  
16 defendant is a citizen of a State; or (C) any member of a class of plaintiffs is a  
17 citizen of a State and any defendant is a foreign state or a citizen or subject of a  
18 foreign state.<sup>2</sup>

### 19 **PARTIES**

20 2. The PLAINTIFFS:

- 21 1.) LINDSEY R. COOPER
- 22 2.) JASMINE ALLEN
- 23 3.) NELLIE ALLEN-LOGAN
- 24 4.) RHONDA ANBERT

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26 <sup>1</sup> Diversity jurisdiction is currently codified at 28 U.S.C. §1332,  
27 <http://www.law.cornell.edu/uscode/28/1332thml>; also see Ghotra v. Bandila  
28 Shipping, Inc., 713 F3d 1050, 1054, 9<sup>th</sup> Cir. 1997

<sup>2</sup> 28 U.S.C. §1332

- 5.) ADAM ARMENTA
- 6.) SUSAN ASH
- 7.) Jinky M. A., Individually and as the Administrator of the Estate of CHARLIEMAGNE T. A.
- 8.) J. A. a Minor By His Mother As Guardian Ad Litem JINKY M. A., .
- 9.) J.C.A. a Minor By His Mother As Guardian Ad Litem JINKY M. A.,
- 10.) DANA AUSTIN
- 11.) RENAR AWA
- 12.) JOSH BANE
- 13.) ARAMIS BARRIOS
- 14.) TREVOR BECK
- 15.) MARKUS BEGAY
- 16.) JORDAN BENOIT
- 17.) JAMI BESCHORNER
- 18.) JORDAN BETTENCOURT
- 19.) BRETT A. BINGHAM
- 20.) CHRIS BITTNER
- 21.) GUNNAR BORTHICK
- 22.) KENNETH CLEO BOSWELL
- 23.) JAMES P. BOWEN
- 24.) MATTHEW BRADLEY
- 25.) NICOLAS BREWTON
- 26.) NICOLAUS BROOKS
- 27.) RYAN S. BROWN
- 28.) CASEY BRUCKLACHER
- 29.) REBECCA BRUNET
- 30.) GERARDO BRUING
- 31.) ROBIN CALCATERRA
- 32.) NATHAN CANCHE
- 33.) ROBBY CANLAS
- 34.) ANTHONY CARLISI
- 35.) COURTNEY CARMICHAEL

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- 36.) MATTHEW CARTWRIGHT
- 37.) WAYNE CASSAR
- 38.) FABIAN CERVANTES
- 39.) MELVIN A. CHAMBERLAIN
- 40.) TERANCE CHAPMAN
- 41.) WILLIAM CHAPMAN JR.
- 42.) ANNMARIE CHESSARI
- 43.) DAVID CHITWOOD
- 44.) GEORGE COBB
- 45.) LORI LYNN CODY
- 46.) KEONDICE W COOK
- 47.) ANGELA. CRABTREE
- 48.) NATHAN CRISWELL
- 49.) CHAD CROFT
- 50.) BRIAN CROSS
- 51.) NICOLAS CROUCH
- 52.) THOMAS CULBERSON
- 53.) VICENT CURCI
- 54.) HONDA DAGAN
- 55.) JAMES DARNELL
- 56.) JANELLE DARNELL
- 57.) JASON DASILVA
- 58.) JOHN DAVIS
- 59.) MARK DECASA
- 60.) NICHOLE M. DECATUR
- 61.) MARTIN DELGARDILLO
- 62.) TINA DIBERNARDO
- 63.) BRANDON DOCKERY
- 64.) J. D., A MINOR BY HIS FATHER AS GUARDIAN AD  
LITEM JEREMY D.,
- 65.) JEREMY D
- 66.) CHRISTIAN DOERR
- 67.) IAN W. DOVE
- 68.) JESSE DUNN



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- 69.) CHRISTINA DUVALL
- 70.) CHRISTIAN JOY NAGUI EBUENG
- 71.) PAUL ENCINIAS
- 72.) MAURICE ENIS
- 73.) ANGEL ESCRIBANO
- 74.) SETH ESLIN
- 75.) NICHOLAS J. FELLER
- 76.) KYLE E. FELT
- 77.) TERI FORZA
- 78.) JASON TROY FRIEL
- 79.) JOEL FUDGE
- 80.) PAUL GABBY
- 81.) SHANE GALLAGHER
- 82.) ANTHONY GARCIA
- 83.) ZACH GARNER
- 84.) JENNIFER GUANA
- 85.) A. G., AN INFANT BY HER MOTHER AS GUARDIAN  
AD LITEM, KIM G.
- 86.) KIM G
- 87.) OSCAR GONZALEZ
- 88.) JOHN OLIVER GOOCH IV
- 89.) JUDY GOODWIN
- 90.) KATE GRACE
- 91.) DAVID HAHN
- 92.) DANIEL E. HAIR
- 93.) ANDREW HAJNY
- 94.) ROBERT HAREWOOD
- 95.) DANIEL PATRICK HARREN
- 96.) JOSHUA HARRIGAN
- 97.) CHAD HARRIS
- 98.) ROBERT C. HARTAGE
- 99.) TIFFANY HARTMAN
- 100.) NICHOLAS HELMSTADT
- 101.) ASHTON HEMPHILL

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- 102.) JASON DAVID HENRY
- 103.) ERIN HERRING
- 104.) CORA E. HILL
- 105.) M. H. a Minor By Allison D. Eyring Her Mother As  
Guardian Ad Litem
- 106.) THE ESTATE OF THEODORE H., By Manuel Leslie As  
The Administrator Of The Estate Of Theodore H.
- 107.) CHAD HOLT
- 108.) NEIL HOPKINS
- 109.) DYLAN IMGRAM
- 110.) NICK INCA
- 111.) JEDIDIAH IRONS
- 112.) GERARDO IRVING
- 113.) BLAKE ISAACS
- 114.) DARIUS JACKSON
- 115.) JAMES JACKSON
- 116.) JESSICA JACKSON
- 117.) CHRISTIAN A. JESSUP
- 118.) JARRET BRADY JOHNSTON
- 119.) WILLIAM JONES
- 120.) WINSTON JONES
- 121.) LEON JULIAN
- 122.) CHARLES D. KAISER
- 123.) TOOMER KANISHA
- 124.) DANIEL KREGSTEIN
- 125.) ADAM WERNER KRUTZLER
- 126.) ZACKARY KUBE
- 127.) SHANE M. LANGNES
- 128.) DANIEL LAWVIER
- 129.) ROBERT LEHRMAN
- 130.) JULIAN LEON
- 131.) JOANNA ILOILO
- 132.) MARY LOKKA
- 133.) NICOLE LOOK FANG

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- 134.) ALYSSA LOPEZ
- 135.) ZACKERY LOUVERS
- 136.) CHRISTOPHER LOWE
- 137.) ALEJANDRO LUSK
- 138.) CORA MAE
- 139.) DAVID MALONE
- 140.) BILLY MARKHAM
- 141.) ALEX MARTIN
- 142.) ALFRED MCALLISTER
- 143.) DIANNA MCCANTS
- 144.) THOMAS MCCANTS
- 145.) CHENEIL MCCARTER
- 146.) TYLER MCDONALD
- 147.) PETINA MCINTOSH
- 148.) ANDREW MEADE
- 149.) JONATHAN MEDINA (FORMERLY INCLUDED AS  
JOSEPH MEDINA)
- 150.) ERIK MEMBRILA
- 151.) RYAN MENENDEZ
- 152.) MICHAEL MESIGH
- 153.) JENNIFER MICKE
- 154.) ROBERT M. MILLER
- 155.) ADAM WERNER MINTZ
- 156.) SAMY MOHANIE
- 157.) JOEL MONSALUD
- 158.) LETICIA MORALES
- 159.) KEVIN MORRIS
- 160.) COLIN MORRISON
- 161.) MALLORY K. MORROW
- 162.) TIMOTHY MUIS
- 163.) WILLIAM NETHERTON
- 164.) JON NEUMANN
- 165.) MARK NEWMAN
- 166.) MICHELLE ODEN

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- 167.) DANIEL OLSEN
- 168.) MIKE TISOY ORMAN
- 169.) CHRISTOPHER PETERSON
- 170.) MATTHEW PETERSON
- 171.) ALYSSA PETTERWAY
- 172.) NATHAN PIEKUTOSKI
- 173.) JAIME LEIGH PLYM
- 174.) KEITH POTTRATZ
- 175.) DANIEL PRETTO
- 176.) DONALD RAIRIGH
- 177.) ASHLEY RAMIREZ
- 178.) TYLER RAY RANDRUP
- 179.) CHRISTOPHER RICKARD
- 180.) ANDREW RIVERA
- 181.) SUSAN RODRIQUEZ
- 182.) BRANDEN RUCKER
- 183.) W. RUSHBY
- 184.) ERICA RYAN
- 185.) DAVID SANCHEZ
- 186.) DANE SANTO
- 187.) DAISY M. SARSLOW
- 188.) K. S., AN INFANT BY HIS FATHER AS GUARDIAN AD  
LITEM, MICHAEL L. S
- 189.) MICHAEL L. S.
- 190.) JOHN SEELBACH
- 191.) ROBERT SEELIGMAN
- 192.) BENITO G SERENTAS JR
- 193.) KELLI SERIO
- 194.) CHRISTOPHER SHAMRELL
- 195.) MICHAEL B. SHANNON
- 196.) STEVEN RAY SIMMONS
- 197.) RYAN SIVELS
- 198.) JOSHUA C. SMILEY
- 199.) AKEEM SMITH

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- 200.) BRANDON SMITH
- 201.) JUSTIN SPENCER
- 202.) ALAN SPURLING
- 203.) FRANCES FISTER STOGA
- 204.) JAMES SUTTON
- 205.) BYRON SY
- 206.) KELLY TANNEHILL
- 207.) NIGEL THOMPSON
- 208.) CHAD THORTON
- 209.) MICHAEL TIMKO
- 210.) ANGEL TORRES
- 211.) PATRICIA TOTEMEIER
- 212.) JAMES TRICE
- 213.) DARREL USRY
- 214.) MARK VALDEZ
- 215.) OSVALDO VERA
- 216.) KAILEE VICTRUM
- 217.) LOUIE VIERNES
- 218.) ANDREW VODOPIJA
- 219.) ANDREW VROOMAN
- 220.) SKYLER STEVEN WARNOCK
- 221.) TAWNY WATSON
- 222.) TIMOTHY J. WENDAL
- 223.) IAN LEE WHEATON
- 224.) EDWARD JOSEPH WICKLE
- 225.) CAROLYN WHITE
- 226.) TIM WHITE
- 227.) ELOI WHITEMAN
- 228.) PATRICK WIGHT
- 229.) KRISTIAN WILLIAM
- 230.) TIM WOELKY
- 231.) JUSTIN WOMMACK
- 232.) RONALD WRIGHT
- 233.) KIOCHI YAMAZAKI

- 234.) CHAD YARBROUGH
- 235.) CHARLES YARRIS
- 236.) ANTHONY J. YOVANOVIC
- 237.) JONATHAN ZAVITZ
- 238.) WILLIAM J. ZELLER
- 239.) MICHAEL ZITELLA

on Behalf of Themselves and Others Similarly Situated, at all times herein mentioned were among the members of the U.S. Navy crews of the U.S.S. RONALD REAGAN (CVN-76), with its home port in San Diego, California, the crews of other vessels participating as part of the Reagan Strike Force, 7<sup>th</sup> Fleet, land-based service personnel, and/or their dependents. All of the Plaintiffs were repeatedly exposed to ionizing radiation on or after March 11, 2011, due to the release of radioisotopes from the Fukushima Nuclear Power Plant (hereinafter, “FNPP”). All of the PLAINTIFFS were exposed during the mission known as “Operation Tomodachi.”<sup>3</sup>

3. Plaintiff LINDSAY R. COOPER, born July 12, 1989, who served as an aviation boatswain’s mate stationed on the flight deck, is and was at all times mentioned herein a citizen of the State of California.

4. Plaintiff JAMES R. SUTTON, born June 10, 1987, who served as a boatswain’s mate and was aircraft director on the flight deck, is and was at all times mentioned a citizen of the State of Washington.

5. Plaintiff KIM G., born January 28, 1989, who served as a boatswain’s mate on the flight deck, is and was at all times mentioned a citizen of the State of California.

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<sup>3</sup> On March 14, 2011, the U.S. 7<sup>th</sup> Fleet, U.S. Naval personnel, and aircraft aboard the vessels were repositioned away from Japan’s FNPP after detecting contamination in the air and on the helicopters returning to the U.S.S. Ronald Reagan (CVN-76) from ferrying supplies to the land on aircraft deployed by the U. Sed.

1 6. Plaintiff A. G., BY HER MOTHER AS GUARDIAN AD LITEM, KIM G.,  
2 born October 15, 2011, is and was a citizen of the State of California.

3 7. Plaintiff CHARLES A. YARRIS, born December 3, 1988, who served as a  
4 boatswain's mate as a director on the flight deck, is and was at all times mentioned  
5 a citizen of the State of Ohio.

6 8. Plaintiff ROBERT M. MILLER, born April 19, 1986, who served as a  
7 boatswain's mate handler in the air department, is and was at all times mentioned a  
8 citizen of the State of California.

9 9. Plaintiff CHRISTOPHER G. BITTNER, born July 21, 1985, who served as  
10 an aviation boatswain's mate stationed on the flight deck, is and was at all times  
11 mentioned a citizen of the State of New Mexico.

12 10. Plaintiff ERIC MEMBRILA, born July 28, 1974, who served as a specialist  
13 in air decontamination, is and was at all times mentioned a citizen of the State of  
14 California.

15 11. Plaintiff JUDY C. GOODWIN, born January 9, 1988, was an aviation  
16 boatswain's mate stationed on the flight deck, is and was at all times mentioned a  
17 citizen of the State of New Mexico.

18 12. Plaintiff JENNIFER L. MICKE, born October 14, 1990, who served as an  
19 aviation structural mechanic, is and was at all times mentioned a citizen of the  
20 State of Wisconsin.

21 13. Plaintiff JOHN W. SEELBACH, born October 19, 1985, who served as an  
22 aviation electronics troubleshooter, is and was at all times mentioned a citizen of  
23 the State of California.

24 14. Plaintiff MAURICE D. ENIS, born October 8, 1987, who served as a  
25 navigation quartermaster, is and was at all times mentioned a citizen of the State of  
26 Florida.  
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1 15. Plaintiff JAIME L. PLYM, born October 26, 1984, who served as a  
2 navigator-plotter, is and was at all times mentioned a citizen of the State of Florida.

3 16. Plaintiff NATHAN J. PIEKUTOWSKI, born February 15, 1991, who  
4 served as a marine aboard the USS Essex, is and was at all times mentioned a  
5 citizen of the State of Illinois.

6 17. Plaintiff CAROLYN A. WHITE, born October 16, 1979, who served as  
7 expedition division chief on the USS Ronald Reagan, is and was at all times  
8 mentioned a citizen of the State of California.

9 18. Plaintiff LOUIE VIERNES, born April 4, 1987, who served as a deck  
10 seaman on the U.S.S. Cowpens, is and was at all times mentioned a citizen of the  
11 State of California.

12 19. Plaintiff MICHAEL L. S., born August 24, 1974, who served as a  
13 decontamination coordinator, is and was at all times mentioned a citizen of the  
14 State of California.

15 20. Plaintiff K. S.<sup>4</sup>, born November 10, 2002, by his father and natural  
16 guardian, MICHAEL L. S., is and was at all times mentioned a citizen of the State  
17 of California.

18 21. Plaintiff CHRISTIAN EBUENG, born January 20, 1988, who served as an  
19 aviation life-support technician on the USS Reagan, is and was at all times  
20 mentioned a citizen of the State of California.  
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24 <sup>4</sup> Infants are most vulnerable due to their more rapidly growing cells, and when the  
25 maternal host is exposed to radioactive isotopes, this can be fatal or highly  
26 damaging to the fetus. It has been reported that by one year post Fukushima (by  
27 May, 2012), up to 35% of Japan's monitored children have been found with cysts  
28 or other unnatural developments on their thyroid glands. This indicates there are  
both increased and unsafe levels in their environment and that they should have  
been evacuated to far more than only 12-20 miles beyond the FNPP site.



1 22. Plaintiff PAUL J. ENCINIAS, born March 10, 1984, who served as plane  
2 captain, launch and recovery aboard the USS Reagan, is and was at all times  
3 mentioned a citizen of the State of California.

4 23. Plaintiff DANIEL E. HAIR, born September 13, 1984, who served as an  
5 administrator aboard the USS Reagan, is and was at all times mentioned a citizen  
6 of the State of California.

7 24. Plaintiff ADAM W. KRUTZLER, born December 18, 1989, who served as  
8 an aircraft electrician, plane captain and flight deck supervisor aboard the USS  
9 Reagan, is and was at all relevant times a citizen of Oklahoma.

10 25. Plaintiff DAVID K. MALONE, born April 12, 1985, who served as an  
11 aircraft engine mechanic, aviation machinist mate, is and was at all times  
12 mentioned a citizen of the State of Washington.

13 26. Plaintiff ROBERT SELIGMAN, born August 26, 1985, who served as an  
14 aircraft fuel technician aboard the USS Reagan, is and was at all times mentioned a  
15 citizen of the State of Arizona.

16 27. Plaintiff ELOI A. WHITEMAN, born December 1, 1949, who served as a  
17 technician aboard the USS Reagan, is and was at all times mentioned a citizen of  
18 the State of California.

19 28. Plaintiff ARAMIS A. BERRIOS, born September 15, 1987, who served as a  
20 USN-E5- YN/WCS/ Engineering Department aboard the USS Reagan, is and was  
21 at all times mentioned a citizen of the State of California.

22 29. Plaintiff RYAN S. BROWN, born May 12, 1982, who served as a USN-E5-  
23 Second Class Petty Officer, Hull Maintenance Technician aboard the USS Reagan,  
24 is and was at all times mentioned a citizen of the State of Louisiana.  
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1 30. Plaintiff COURTNEY R. CARMICHAEL, born October 6, 1982, who  
2 served as a USN-E1- Aviation Structural Mechanic aboard the USS Reagan, is and  
3 was at all times mentioned a citizen of the State of California.

4 31. Plaintiff WILLIAM V. CHAPMAN, born August 24, 1970, who served as a  
5 USN-E8- Flight Deck Coordinator aboard the USS Reagan, is and was at all times  
6 mentioned a citizen of the State of California.

7 32. Plaintiff JOHN D. DAVIS, born March 6, 1977, who served as a USN-E-7-  
8 HTC/Repair-CPO stationed on the USS Essex, and is and was at all times  
9 mentioned a citizen of the State of Maryland.

10 33. Plaintiff KYLE W. FELT, born March 4, 1987, who served as a USN-E5-  
11 Engineering Department while aboard the USS Reagan, is and was at all times  
12 mentioned a citizen of the State of California.

13 34. Plaintiff KATE M. GRACE, born July 16, 1979, who served as a USN-E1-  
14 Aviation Ordinance while aboard the USS Reagan, is and was at all times  
15 mentioned a citizen of the State of Washington.

16 35. Plaintiff SHANE Q. GALLAGHER, born June 8, 1987, who served as a  
17 USMC-E5-Reconnaissance while aboard the USS Essex, is and was at all times  
18 mentioned a citizen of the State of Massachusetts.

19 36. Plaintiff, ROBERT C. HARTAGE, born March 11, 1985, who served as a  
20 USN-E4-Yeoman while aboard the USS Reagan, is and was at all times mentioned  
21 a citizen of the State of South Carolina.

22 37. Plaintiff, CHRISTIAN A JESSUP, born July 18, 1978, who served as a  
23 USN-E-6-Tomahawk Administrator, while aboard the USS Reagan, is and was at  
24 all times mentioned a citizen of the State of Florida.  
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1 38. Plaintiff, DANIEL B. LAWVER, born June 15, 1992, who served as a  
2 USN-E-1-Gunners Mate, while aboard the USS Reagan, is and was at all times  
3 mentioned a citizen of the State of Wisconsin.

4 39. Plaintiff, THOMAS L. McCANTS, born September 29,, 1984, who served  
5 as a USN-E 5- Electronics technician, while aboard the USS Germantown, is and  
6 was at all times mentioned a citizen of the State of Washington.

7 40. Plaintiff, BENITO G. SERENTAS, JR., born June 5, 1959, who served as a  
8 USN-Contractor Tarp Representative for Lerdos Corporation while aboard the  
9 USS Reagan, is and was at all times mentioned a citizen of the State of California.

10 41. Plaintiff, KELLI D. SERIO, born July 24, 1989, who served as a USN-E-2-  
11 Quartermaster while aboard the USS Reagan, is and was at all times mentioned a  
12 citizen of the State of California.

13 42. Plaintiff, MICHAEL B. SHANNON, born September 4, 1981, who served  
14 as a USN-E-5-Electronic technician while aboard the USS Reagan, is and was at  
15 all times mentioned a citizen of the State of Oklahoma.

16 43. Plaintiff, KRISTIAN R. WILLIAMS, born April 1, 1970, who served as a  
17 USN-05-Commander-Pilot assigned to Atsugi, Japan, is and was at all times  
18 mentioned a citizen of the State of Texas.

19 44. Plaintiff, WILLIAM J. ZELLER, born April 12, 1987, who served as a  
20 USN-E-3-Security Force (SF-2), is and was at all times mentioned a citizen of the  
21 State of California.

22 45. Plaintiff, CORA E. HILL, born August 29, 1983, who served as a USN-E5-  
23 Electronic technician, is and was at all times mentioned a citizen of the State of  
24 California.  
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1 46. Plaintiff DANIEL E. HAIR, born September 13, 1984, who served as an  
2 administrator aboard the USS Reagan, is and was at all times mentioned a citizen  
3 of the State of California.

4 47. Plaintiff GUNNAR W. BORTHICK, born April 18, 1987, who served as a  
5 USN-E-5-Maintenance Man aboard the USS Chancellorsville, is and was at all  
6 times mentioned a citizen of the State of Texas.

7 48. Plaintiff JAMI L. BESCHORNER, born January 23, 1986, who served as a  
8 USN-E-5 Avionics Electronics Technician aboard the USS Reagan, is and was at  
9 all times mentioned a citizen of the State of California.

10 49. Plaintiff NATHAN A. CRISWELL, born July 26, 1988 who served as a  
11 USN-E-4-Avionics Electronics Technician aboard the USS Reagan, is and was at  
12 all times mentioned a citizen of the State of Colorado.

13 50. Plaintiff JASON T. FRIEL, born July 2, 1980 who served as a USN-E-6  
14 Sonar Technician aboard the USS Reagan, is and was at all times mentioned a  
15 citizen of the State of California.

16 51. Plaintiff OSCAR J. GONZALEZ, born December 19, 1984, who served as  
17 a USN-E-3 Aviation Ordinance Technician aboard the USS Reagan, is and was at  
18 all times mentioned a citizen of the State of New Jersey.

19 52. Plaintiff DANIEL J. HAHN, who served as a USN-LT. Commander aboard  
20 the USS Reagan, is and was at all times mentioned a citizen of the State of  
21 Arizona.

22 53. Plaintiff D. J. J., born July 3, 1999, a minor, by his father and natural  
23 guardian James E.J. was residing at Yokosuka, Japan, is and was at all times  
24 mentioned a citizen of the State of California.  
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1 54. Plaintiff JAMES E. J., born September 22, 1977, who served as a USN-E-6-  
2 IT-LPO assigned to the Yokosuka, Japan, is and was at all times mentioned a  
3 citizen of the State of California.

4 55. Plaintiff JARRETT B. JOHNSTON, born December 5, 1985, who served as  
5 a USN-E-Senior Airman, Avionics Electronics Technician aboard the USS  
6 Reagan, is and was at all times mentioned a citizen of the State of Alabama.

7 56. Plaintiff JOHNATHAN MEDINA, born November 7, 1972, who served as  
8 a USN-E-6 Supervisor Aircraft Mechanic aboard the USS Reagan, is and was at all  
9 times mentioned a citizen of the State of California.

10 57. Plaintiff ADAM J. MINTZ, born April 23, 1991 who served as a USN-E-3  
11 Avionics Technician aboard the USS Reagan, is and was at all times mentioned a  
12 citizen of the State of California.

13 58. Plaintiff MICHAEL R. MORROW, born July 6, 1983, who served as a  
14 USN-E-6 Avionics Electronics Technician aboard the USS Reagan, is and was at  
15 all times a citizen of the State of Arkansas.

16 59. Plaintiff WILLIAM O. NETHERTON, born April 18, 1987, who served as  
17 a USN-E-4 Air Frame Technician assigned to NAS, Atsugi, Japan, is and was at all  
18 times mentioned a citizen of the State of California.

19 60. Plaintiff MICHELLE R. ODEN, born March 26, 1981, who served as a  
20 USN-E-6 Aviation Electronics Technicians aboard the USS Reagan, is and was at  
21 all times mentioned a citizen of the State of California.

22 61. Plaintiff RONALD A. RAIRIGH, born May 8, 1974, who served as a USN-  
23 E-6 Electrician aboard the USS Reagan, is and was at all times mentioned a citizen  
24 of the State of California.  
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1 62. Plaintiff CHRISTOPHER S. RICKARD, born October 10, 1985, who  
2 served as a USN-E-5 Security assigned to NAS, Atsugi, Japan, is and was at all  
3 times mentioned a citizen of the State of Florida.

4 63. Plaintiff ANDREW T. RIVERA, born December 21, 1986, who served as a  
5 USN-E-4–Avionics Machinists Mate aboard the USS Reagan, is and was at all  
6 times mentioned a citizen of the State of Washington.

7 64. Plaintiff STEVEN R. SIMMONS, born December 15, 1977, who served as  
8 a USN-LT.JG/02E- aboard the USS Reagan, is and was at all times mentioned a  
9 citizen of the State of Utah.

10 65. Plaintiff AKEEM R. SMITH, born June 6, 1986, who served as a USN-E4-  
11 Culinary Specialist aboard the USS Reagan, is and was at all times mentioned a  
12 citizen of the State of California.

13 66. Plaintiff ALAN W. SPURLING, born May 16, 1986, who served as a USN-  
14 E-4-Security Specialist aboard the USS Reagan, is and was at all times mentioned  
15 a citizen of the State of California.

16 67. Plaintiff ANGEL L. TORRES, born February 15, 1970, who served as a  
17 USN-CN02 Officer aboard the USS Reagan, is and was at all times mentioned a  
18 citizen of the State of California.

19 68. Plaintiff DAGAN P. HONDA, born December 28, 1983, who served as a  
20 USN-E-6-Aviation Boatswain Mate aboard the USS Reagan, is and was at all  
21 times mentioned a citizen of the State of Washington.

22 69. Plaintiff RONALD E. WRIGHT, born January 5, 1990, who served as a  
23 USN-E-4-Aviation Structural Mechanic aboard the USS Reagan, is and was at all  
24 times a citizen of the State of Washington.

25 70. Plaintiff NELLI ALLEN-LOGAN who served aboard the USS Reagan, is  
26 and was at all times mentioned a citizen of the United States.  
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1 71. Plaintiff, NATHAN CANCHE, who served aboard the USS Reagan, is and  
2 was at all times mentioned a citizen of the United States.

3 72. Plaintiff JUSTIN SPENCER, who served aboard the USS Reagan, is and  
4 was at all times mentioned a citizen of the United States.

5 73. Plaintiff TREVOR BECK, born January 19, 1990, who served as an  
6 Electronics Technician aboard the USS Reagan, is and was at all times mentioned  
7 a citizen of the State of the State of California.

8 74. Plaintiff ASHLEY RAMIREZ, born April 17, 1990, who served as  
9 Logistics Specialist, aboard the USS George Washington, is and was at all times  
10 mentioned a citizen of the State of California.

11 75. Plaintiff OSVALDO VERA, born October 14, 1987, who served on board  
12 of the USS Ronald Reagan as an Electronics technician, is and was at all times  
13 mentioned a citizen of Bremerton, Washington.

14 76. Plaintiff BRANDON SMITH, born January 1, 1990, who served on board  
15 the USS Reagan as an Electronics Technician, is and was at all times mentioned a  
16 citizen of the State of California.

17 77. Plaintiff DANIEL B LAWVER, born September 20, 1984, who served on  
18 board the USS Reagan as an Electronics Technician, is and was at all times  
19 mentioned a citizen of the State of California.

20 78. Plaintiff LETICIA MORALES, born 10 July 1979, who was on board the  
21 USS Reagan and served as Quality Assurance on the flight deck during all aircraft  
22 launches and recoveries, during maintenance, and as an inspector, is and was at all  
23 times mentioned a citizen of Mount Vernon, WA.

24 79. Plaintiff MICHAEL ZITELLA, who served on the USS Ronald Regan, is  
25 and was at all times mentioned a citizen of the State of California.  
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1 80. Plaintiff JONATHAN COLBY ZAVITZ, born February 16, 1983, who was  
2 stationed aboard the USS Fitzgerald as a SPY Fire control-man responsible for the  
3 ship's phased array air search radar, is and was at all times mentioned a citizen of  
4 the State of California.

5 81. Plaintiff JEDEDIAH IRONS, born October 8, 1986, who was stationed on  
6 the USS Ronald Reagan, is and was at all times mentioned a citizen of the State of  
7 New York.

8 82. Plaintiff ANTHONY GARCIA, born November 9, 1988, who served as  
9 USN personnel aboard the USS Chancellorsville, is and was at all times mentioned  
10 a citizen of the state of Wyoming.

11 83. PLAINTIFFS' injuries, losses, damages, and harms are the results of  
12 DEFENDANTS' illegal conduct, including the negligently designed and  
13 maintained GE Boiling Water Reactor, which contains numerous design and  
14 manufacturing defects. These harms include, but are not limited to, the following:  
15 Illnesses such as Leukemia, ulcers, gall bladder removals, brain cancer, brain  
16 tumors, testicular cancer, dysfunctional uterine bleeding, thyroid illnesses, stomach  
17 ailments, birth defects, death, and a host of other complaints unusual in such young  
18 adults and victims. The injured servicemen and women will require treatment for  
19 their deteriorating health, medical monitoring, payment of their medical bills,  
20 appropriate health monitoring for their children, and monitoring for possible  
21 radiation-induced genetic mutations. Some of the radioactive particles inside these  
22 service personnel have long half-lives, from 6 to 50 to 100 years. One Sailor, age  
23 22, has been diagnosed with Leukemia and is losing his eyesight. In his declaration  
24 to the court he states, "Upon my return from Operation Tomodachi, I began losing  
25 my eyesight. I lost all vision in my left eye and most vision in my right eye. I am  
26 unable to read street signs and am no longer able to drive. Prior to Operation  
27  
28



1 Tomodachi, I had 20/20 eyesight, wore no glasses and had no corrective eye  
2 surgery. Additionally, I know of no family members who have had leukemia.”

3 84. PLAINTIFFS have only recently, within all the relevant statutes of  
4 limitation periods, discovered the facts pertaining to the nature and extent of their  
5 injuries. PLAINTIFFS also have just recently discovered facts which show  
6 DEFENDANTS’ illegal conduct, as well as DEFENDANTS’ negligent conduct in  
7 the engineering, construction, maintenance, operation, management and control of  
8 the defectively designed Fukushima Nuclear Power Plant. PLAINTIFFS recently  
9 discovered facts showing that DEFENDANTS’ negligence and defective design of  
10 FNPP which caused injuries to PLAINTIFFS occurred before, during and after the  
11 March 11, 2011 earthquake and tsunami. Within all the relevant statutes of  
12 limitation periods, PLAINTIFFS discovered the facts which prove that  
13 DEFENDANTS, and each of them, are the actual and proximate cause of their  
14 injuries, damages and harm. This delayed discovery tolls, both in equity and in  
15 law, the expiration of the statutes of limitation.  
16

17 85. DEFENDANT TOKYO ELECTRIC POWER COMPANY, INC. aka  
18 TEPCO, (hereinafter, “TEPCO”), at all times herein mentioned, was and still is a  
19 foreign corporation, organized and existing under the laws of Japan, with its  
20 principal place of business situated at 1-1-3 Uchisai wai-Cho, Chiyoda-Ku, in the  
21 city of Tokyo, Japan, and with offices located at Suite 720, 1901 L Street N.W.,  
22 Washington, D.C. 20036. In 2003, TEPCO registered as a California foreign  
23 corporation with the California Secretary of State. TEPCO is the largest electric  
24 utility in Japan and the 4th largest electric utility in the world. TEPCO enjoys  
25 billions of dollars in revenue from electricity sales. During all times relevant,  
26 TEPCO conducted business as a foreign Corporation registered in the State of  
27 California. Hence, TEPCO is subject to the jurisdiction of this United States  
28

1 Federal District Court, which is empowered to enforce any Judgment against  
2 DEFENDANT TEPCO.

3 86. DEFENDANT TEPCO is a wholly owned public benefit corporation,  
4 charged with the responsibility to provide electric power to the people of Japan.

5 87. DEFENDANT GENERAL ELECTRIC, at all times herein mentioned, was  
6 and still is a for-profit corporation, organized and existing under the laws of the  
7 United States of America, with its principal place of business and Corporate  
8 Headquarters located at General Electric Company, 3135 Easton Turnpike,  
9 Fairfield, CT 06828.

10 88. GENERAL ELECTRIC (GE) is an American multinational conglomerate  
11 corporation incorporated in New York. The company operates through the  
12 following segments: Energy, Technology Infrastructure, Capital Finance as well as  
13 Consumer and Industrial.  
14

15 89. In 2011, GE ranked among the Fortune 500 as the 26th-largest firm in the  
16 U.S. by gross revenue, as well as the 14th most profitable. The company is listed as  
17 the fourth largest in the world among the Forbes Global 2000.

18 90. DEFENDANT HITACHI, Ltd. is a Japanese multinational engineering and  
19 electronics conglomerate company, headquartered in Chiyoda, Tokyo, Japan. It is  
20 the parent company of the Hitachi Group. Hitachi America, Ltd. was established in  
21 1959. They are located at 50 Prospect Avenue, Tarrytown, NY 10591. In October  
22 of 1986, Hitachi, Ltd. established a California based public affairs and community  
23 relations office located in Century City, Los Angeles.

24 91. DEFENDANT TOSHIBA America Nuclear Energy Corporation is  
25 headquartered at 3545 Whitehall Park Drive, Suite 500, Charlotte, NC 28273.  
26 Toshiba Nuclear Energy Holdings (US), Inc. is located at 1251 Avenue of the  
27 Americas, Suite 4110, New York, NY 10020 USA. Toshiba Corporation, the  
28

1 Tokyo-based parent company, established American operations in 1965 through  
2 the incorporation of Toshiba America, Inc.

3 92. DEFENDANT EBASCO was incorporated in the State of New York, with  
4 its main business address located at 300 S. Saint Paul St., Suite 660, Dallas, TX  
5 75201. The Electric Bond and Share Company was originally a holding company  
6 that sold securities of electric utilities. It was created by General Electric in 1905.  
7 The company was restructured after the Public Utility Holding Company Act of  
8 1935. Later known as EBASCO Services, it provided engineering, consulting and  
9 construction services. Among other projects, EBASCO designed nuclear power  
10 plants. EBASCO Services was one of the major US architect-engineering  
11 companies who coordinated the design of many nuclear power plants, both in the  
12 USA and abroad, including the Fukushima Daiichi Nuclear Power Plant (units 1, 2  
13 and 6).

14 93. At all times herein mentioned, DEFENDANTS, and each of them, derived  
15 substantial revenue from their activities via goods used or consumed in the United  
16 States of America and its several States, including the State of California, through  
17 the operation of the FNPP.  
18

19 94. At all times herein mentioned, DEFENDANTS, and each of them, expected  
20 or should reasonably have expected their acts to have consequences in the State of  
21 California and elsewhere within the United States of America.

22 95. At all times herein mentioned, the DEFENDANTS, and each of them,  
23 derived substantial revenue from interstate or international commerce.

24 96. At all times herein mentioned, DEFENDANT TEPCO owned the premises  
25 where the FNPP was situated, within the prefecture of Fukushima, Japan.

26 97. At all times herein mentioned, DEFENDANT TEPCO was one of the  
27 owners of the FNPP.  
28

1 98. At all times herein mentioned, DEFENDANT TEPCO was a lessee of the  
2 FNPP.

3 99. At all times herein mentioned, the DEFENDANTS, and each of them,  
4 DEFENDANTS' servants, agents and DEFENDANTS' employees operated the  
5 FNPP.

6 100. At all times herein mentioned, the DEFENDANTS, and each of them,  
7 DEFENDANTS' servants, agents and employees engineered, constructed,  
8 maintained, operated, managed and controlled the FNPP.

9 101. At all times herein mentioned, DEFENDANT TEPCO, TEPCO'S  
10 servants, agents and employees supervised the FNPP.

11 102. On or before March 10, 2011, DEFENDANT TEPCO, TEPCO'S  
12 servants, agents and employees negligently attempted to perform repairs at the  
13 FNPP.

14 103. On or before March 10, 2011, DEFENDANT TEPCO, TEPCO'S  
15 servants, agents and employees negligently inspected and negligently failed to  
16 inspect the FNPP.

17 104. On or before March 10, 2011, the DEFENDANTS, and each of them,  
18 the DEFENDANTS' servants, agents and employees negligently engineered,  
19 constructed, maintained, operated, managed and controlled the FNPP.

20 105. More than 40 years ago, the DEFENDANTS, and each of them, the  
21 DEFENDANTS' servants, agents and employees negligently designed, engineered  
22 constructed, maintained, operated, managed, controlled and built the FNPP.  
23

24 **DOE DEFENDANTS**

25 106. PLAINTIFFS have identified the names and capacities and illegal  
26 actions resulting in harm to PLAINTIFFS. PLAINTIFFS have recently learned,  
27 since the filing of the Second Amended Complaint, evidence proving that  
28

1 DEFENDANTS GE, EBASCO, TOSHIBA, and HITACHI negligently designed,  
2 maintained, managed, and prepared the subject Mark 1 Boiling Water Reactors  
3 (“BWR”). These DEFENDANTS are now sued as Does 1-4 respectively.  
4 DEFENDANT GE was the lead designer and creator of the BWR, in collaboration  
5 with DEFENDANTS EBASCO, TOSHIBA, and HITACHI. (Hereinafter  
6 collectively referred to as, “GE DEFENDANTS”). PLAINTIFFS do not know the  
7 true names and capacities, whether individual, corporate, associate, or otherwise of  
8 DEFENDANT Does 5 through 200 inclusive, and therefore sue these  
9 DEFENDANTS by such fictitious names. PLAINTIFFS will amend their  
10 complaint to allege their true names and capacities when this has been ascertained.

### 11 **RESPONDEAT SUPERIOR**

12 108. All of the described conduct, acts, and failures to act are attributed to  
13 agents and employees under the direction and control, and with the permission,  
14 consent and authorization of DEFENDANTS. Said acts, conduct and failures to act  
15 were within the scope of such agency and/or employment, and each of the  
16 DEFENDANTS ratified, endorsed, and agreed to the acts and omissions of each of  
17 the other DEFENDANTS. Each of these acts and failures to act is alleged against  
18 each DEFENDANT, whether acting individually, jointly, or severally. At all times  
19 relevant herein, each DEFENDANT was acting within the course and scope of his  
20 or her employment, agreement, and ratification.

### 21 **STATEMENT OF FACTS**

22 109. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
23 of Fukushima prefecture, the DEFENDANTS, and each of them, were negligent.  
24 This negligence was revealed on December 12, 2013 by the former Prime Minister  
25 of Japan, Naoto Kan, who was in office when the Fukushima disaster took place,  
26 when he admitted for the first time: "People think it was March 12<sup>th</sup> [2011] but the  
27  
28

1 first meltdown occurred 5 hours after the earthquake." Unaware of either the melt-  
2 down or any radio-active release, the U.S. Sailor First Responders arrived off the  
3 coast of Fukushima during the afternoon of March 12, 2011 in order to carry out  
4 their mission of providing humanitarian aid to the victims of the earthquake and  
5 tsunami disaster. At no time did this mission include, nor expand into a response to  
6 a melt-down or a nuclear emergency. Rather, PLAINTIFFS were carrying out their  
7 orders of providing humanitarian aid by delivering clean water, blankets, food, and  
8 other aspects of providing other humanitarian relief to the inhabitants of  
9 Fukushima.

10 110. On MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
11 of Fukushima prefecture, TEPCO was negligent, as revealed on Thursday 5, July  
12 2012, when a Japanese Parliamentary Panel, The Fukushima Nuclear Accident  
13 Independent Investigation Commission, concluded that TEPCO was negligent in  
14 creating a meltdown that "occurred 5 hours after the earthquake": The Commission  
15 accused TEPCO of negligently failing to take adequate precautions, despite  
16 evidence that the area was susceptible to powerful earthquakes and tsunamis. The  
17 Commission concluded that "the accident was clearly 'man-made'. "We believe  
18 that the root causes were the organizational and regulatory systems that supported  
19 faulty rationales for decisions and actions..."

20 21 111. On MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
22 of Fukushima prefecture, TEPCO was negligent, as determined by the  
23 Commission, which found that TEPCO showed a negligent "disregard for global  
24 [safety] trends and a disregard for public safety." The commission's chairman,  
25 Kiyoshi Kurokawa, a professor emeritus at Tokyo University, said in a scathing  
26 introduction that TEPCO managers' cultural traits had caused the disaster. He said:  
27 "What must be admitted-very painfully-is that this was a disaster Made in Japan".  
28

1 The 10-member commission is the panel which is investigating the Fukushima  
2 Daiichi accident. The report follows a six-month investigation involving more than  
3 900 hours of hearings, and interviews with more than 1,100 people.”<sup>5</sup>

4 112. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
5 of Fukushima prefecture, TEPCO was negligent as detailed in the report by the  
6 Fukushima Nuclear Accident Independent Investigation Commission. The  
7 Commission outlines TEPCO’S “errors and willful negligence” at the FNPP before  
8 the earthquake and tsunami which devastated swaths of northeastern Japan on  
9 March 11, bluntly stating that TEPCO negligently created a “man-made disaster”.<sup>6</sup>

10 113. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
11 of Fukushima prefecture, TEPCO was negligent as detailed in the report by the  
12 Fukushima Nuclear Accident Independent Investigation Commission, finding that  
13 the Fukushima plant operators: “...weren't prepared for nuclear accident.” And the  
14 Commission concluded that TEPCO failed to properly prepare for the earthquake  
15 and tsunami, and that “the direct causes of the accident were all foreseeable prior  
16 to March 11, 2011.”<sup>7</sup>

17 114. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
18 of Fukushima prefecture, TEPCO was negligent because TEPCO negligently  
19 “failed to correctly develop the most basic safety requirements-such as assessing  
20 the probability of damage, preparing for containing collateral damage from such a  
21 disaster, and developing evacuation plans.”<sup>8</sup>

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25 <sup>5</sup> [http://www.theguardian.com/environment/2012/jul/05/fukushima-meltdown-](http://www.theguardian.com/environment/2012/jul/05/fukushima-meltdown-manmade-disaster)  
26 [manmade-disaster](http://www.theguardian.com/environment/2012/jul/05/fukushima-meltdown-manmade-disaster)

27 <sup>6</sup> <http://www.cnn.com/2012/07/05/world/asia/japan-fukushima-report/>

28 <sup>7</sup> Id.

<sup>8</sup> Id.

1 115. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
2 of Fukushima prefecture, TEPCO was negligent as evidenced by the “lack of  
3 training and knowledge of the TEPCO workers at the facility [which] reduced the  
4 effectiveness of the response to the situation at a critical time”<sup>9</sup>

5 116. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
6 of Fukushima prefecture, TEPCO was negligent because TEPCO’S managers were  
7 ineffective in “preventing or limiting the consequential damage” at Fukushima  
8 Daiichi.<sup>10</sup>

9 117. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
10 of Fukushima prefecture, TEPCO was negligent, as admitted by TEPCO, which  
11 publicly stated that it “was not fully prepared for the nuclear disaster.” TEPCO’s  
12 final report on the disaster said it “did not have sufficient measures to prevent the  
13 accident. TEPCO’s final report also acknowledged criticism that TEPCO took too  
14 long to disclose information.”<sup>11</sup>

15 118. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
16 of Fukushima prefecture, TEPCO was negligent, as revealed by former Prime  
17 Minister Naoto Kan, who said, “TEPCO and the nuclear safety agency had hidden  
18 key details from him in the days after March 11, adding that he had been as open  
19 as possible with the public, based on the information he had been given. Kan said  
20 he feared further meltdowns that could result in the evacuation of Tokyo—a  
21 metropolitan area of more than 30 million people. Deserting the capital, he added,  
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26 <sup>9</sup> Id.

27 <sup>10</sup> Id.

28 <sup>11</sup> Id.



1 would have brought the government to a standstill and led to “a collapse of the  
2 nation's ability to function”.<sup>12</sup>

3 119. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
4 of Fukushima prefecture, TEPCO was negligent because TEPCO operators of the  
5 Fukushima Daiichi nuclear power plant negligently ignored warnings that the  
6 complex was at risk of damage from a tsunami of the size that hit north-east Japan  
7 in March, negligently dismissing the need for better protection against seawater  
8 flooding. TEPCO officials rejected and scoffed at “unrealistic” estimates made in a  
9 2008 internal report that the plant could be threatened by a tsunami of up to 10.2  
10 meters. The tsunami that crippled backup power supplies at the plant on the  
11 afternoon of 11 March, leading to the meltdown of three (3) reactors, was more  
12 than 14 meters high, yet a tsunami of that height and higher had happened more  
13 than once in Japan’s recent history.<sup>13</sup> The meltdown was caused by design and  
14 manufacturing defects, which resulted in catastrophic “Loss of Coolant Accidents”,  
15 resulting from the reactors’ piping failing, breaking, splitting apart and cracking  
16 during the earthquake.  
17

18 120. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
19 of Fukushima prefecture, TEPCO was negligent because the “Assessments of the  
20 aftermath of Fukushima tell a story of confusion at the site, and a lack of  
21 communication between TEPCO and safety officials.” The Plant's manager, Masao  
22 Yoshida, took early retirement last year after being diagnosed with cancer.<sup>14</sup>  
23

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24 <sup>12</sup> [http://www.theguardian.com/world/2012/may/29/fukushima-inquiry-naoto-](http://www.theguardian.com/world/2012/may/29/fukushima-inquiry-naoto-kan?guni=Article:in%20body%20link)  
25 [kan?guni=Article:in%20body%20link](http://www.theguardian.com/world/2012/may/29/fukushima-inquiry-naoto-kan?guni=Article:in%20body%20link)

26 <sup>13</sup> [http://www.theguardian.com/world/2012/may/29/fukushima-inquiry-naoto-](http://www.theguardian.com/world/2012/may/29/fukushima-inquiry-naoto-kan?guni=Article:in%20body%20link)  
27 [kan?guni=Article:in%20body%20link](http://www.theguardian.com/world/2012/may/29/fukushima-inquiry-naoto-kan?guni=Article:in%20body%20link)

28 <sup>14</sup> Id.

1 121. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
2 of Fukushima prefecture, TEPCO'S then President Masataka Shimizu, although  
3 knowing that his statements were factually untrue, repeatedly assured the public  
4 that "There has been no meltdown," and that the disaster was an unforeseeable  
5 disaster. Both statements were patently false as the meltdowns were in fact already  
6 occurring at the same time as Mr. Shimizu was providing statements to the  
7 contrary and, far from being unforeseeable, the disaster had been repeatedly  
8 forewarned by industry critics since 2008.

9 122. ON AND BEFORE MARCH 11, 2011, before the PLAINTIFFS  
10 arrived off the coast of Fukushima prefecture, TEPCO was negligent because  
11 problems with the fractured, deteriorating, poorly repaired pipes and cooling  
12 system had been pointed out for years. In September 2002, TEPCO admitted  
13 covering up data about cracks in critically important circulation pipes. In their  
14 analysis of the cover-up, The Citizen's Nuclear Information Centre wrote: "The  
15 records that were covered up had to do with cracks in parts of the reactor known as  
16 recirculation pipes. These pipes are there to siphon off heat from the reactor. If  
17 these pipes were to fracture, it would result in a serious accident in which coolant  
18 leaks out."  
19

20 123. ON AND BEFORE MARCH 11, 2011, before the PLAINTIFFS  
21 arrived off the coast of Fukushima prefecture, TEPCO was negligent because on  
22 March 2, only nine days before the meltdown, the government watchdog, the  
23 Nuclear Industrial Safety Agency (NISA), warned TEPCO in regard to its failure  
24 to inspect critical pieces of equipment at the plant, including recirculation pumps.  
25 TEPCO was ordered to make the inspections and perform repairs if needed.<sup>15</sup>  
26

27 <sup>15</sup> [http://www.independent.co.uk/news/world/asia/the-explosive-truth-behind-](http://www.independent.co.uk/news/world/asia/the-explosive-truth-behind-fukushimas-meltdown-2338819.html)  
28 [fukushimas-meltdown-2338819.html](http://www.independent.co.uk/news/world/asia/the-explosive-truth-behind-fukushimas-meltdown-2338819.html)

1 124. ON AND BEFORE MARCH 11, 2011, before the PLAINTIFFS  
2 arrived off the coast of Fukushima prefecture, TEPCO was negligent because Kei  
3 Sugaoka, who conducted on-site inspections at the plant and was the first to blow  
4 the whistle on TEPCO'S data tampering, stated that he was not surprised by what  
5 happened. In a letter to the Japanese government, dated 28 June, 2000, he warned  
6 that TEPCO continued to operate a severely damaged steam dryer in the plant 10  
7 years after he pointed out the problem. "I always thought it was just a matter of  
8 time," he says of the disaster. "This is one of those times in my life when I'm not  
9 happy I was right."<sup>16</sup>

10 125. ON AND BEFORE MARCH 11, 2011, before the PLAINTIFFS  
11 arrived off the coast of Fukushima prefecture, TEPCO was negligent as explained  
12 by Katsunobu Onda, author of TEPCO: The Dark Empire. Mr. Onda explains it  
13 this way: A government or industry admission "raises suspicions about the safety  
14 of every reactor they run. They are using a number of antiquated reactors that have  
15 the same systematic problems, the same wear and tear on the piping." Earthquakes,  
16 of course, are commonplace in Japan.<sup>17</sup>

17 126. ON AND BEFORE MARCH 11, 2011, before the PLAINTIFFS  
18 arrived off the coast of Fukushima prefecture, TEPCO's negligence was uncovered  
19 by Mr. Onda's research. Mr. Onda spoke with several engineers who worked at the  
20 TEPCO plants. One told him that often piping would not match up to the  
21 blueprints. In that case, the only solution was to use heavy machinery to pull the  
22 pipes close enough together to weld them shut. Inspection of piping was often  
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27 <sup>16</sup> Id.

28 <sup>17</sup> Id.

1 cursory and the backs of the pipes, which were hard to reach, were often ignored.  
2 Repair jobs were rushed.<sup>18</sup>

3 127. ON AND BEFORE MARCH 11, 2011, before the PLAINTIFFS  
4 arrived off the coast of Fukushima prefecture, TEPCO was negligent because Mr.  
5 Onda adds: “When I first visited the Fukushima Power Plant it was a web of pipes.  
6 Pipes on the wall, on the ceiling, on the ground. You'd have to walk over them,  
7 duck under them-sometimes you'd bump your head on them. The pipes, which  
8 regulate the heat of the reactor and carry coolant, are the veins and arteries of a  
9 nuclear power plant; the core is the heart. If the pipes burst, vital components don't  
10 reach the heart and thus you have a heart attack, in nuclear terms: meltdown. In  
11 simpler terms, you can't cool a reactor core if the pipes carrying the coolant and  
12 regulating the heat rupture - it doesn't get to the core.”<sup>19</sup> This is precisely what  
13 happened when the earthquake struck the FNPP.  
14

15 128. ON OR BEFORE MARCH 11, 2011, before the PLAINTIFFS arrived  
16 off the coast of Fukushima prefecture, TEPCO was negligent, as admitted by  
17 Tooru Hasuike, a TEPCO employee from 1977 until 2009 and former general  
18 safety manager of the Fukushima plant, who stated: “The emergency plans for a  
19 nuclear disaster at the Fukushima plant had no mention of using seawater to cool  
20 the core. To pump seawater into the core is to destroy the reactor. The only reason  
21 you'd do that is that no other water or coolant was available.”<sup>20</sup>

22 129. ON OR BEFORE MARCH 11, 2011, before the PLAINTIFFS  
23 arrived off the coast of Fukushima prefecture, TEPCO was negligent because  
24 before dawn on March 12, 2011, as the water levels at the reactor began to  
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26 <sup>18</sup> Id.

27 <sup>19</sup> Id.

28 <sup>20</sup> Id.

1 plummet and the radiation began rising, a TEPCO press release published just past  
2 4:00 am stated: "The pressure within the containment vessel is high but stable."  
3 This was willfully false information.<sup>21</sup>

4 130. ON OR BEFORE MARCH 11, 2011, before the PLAINTIFFS  
5 arrived off the coast of Fukushima prefecture, TEPCO was negligent as evidenced  
6 by the fact that at 9:51 pm, under the chief executive's orders, the inside of the  
7 reactor building was declared a no-entry zone. At around 11 pm, radiation levels  
8 for the inside of the turbine building, which was next door to the reactor, reached  
9 levels of 0.5 to 1.2 mSv per hour. In other words, the meltdown was already  
10 underway.<sup>22</sup> The reactors were already melted or deeply involved in melting down.

11 131. ON OR BEFORE MARCH 11, 2011, before the PLAINTIFFS  
12 arrived off the coast of Fukushima prefecture, TEPCO was negligent because  
13 seawater was not pumped in until hours after a hydrogen explosion occurred, at  
14 roughly 8 pm. Sometime between 4 and 6 am on March 12, Masao Yoshida, the  
15 plant manager, decided it was time to pump seawater into the reactor core. By then,  
16 it was already too late.<sup>23</sup>

17 132. ON OR BEFORE MARCH 11, 2011, before the PLAINTIFFS  
18 arrived off the coast of Fukushima prefecture, TEPCO was negligent because  
19 Naomi Hirose, president of TEPCO, admitted negligence: "After I became  
20 president [in 2012], we formed a nuclear safety review committee. We focused  
21 mainly on what we could do, what we could learn. We had a lot of data by then.  
22 Three other reports, one from the Diet [Japan's parliament], one from government.  
23 We had a lot of information. TEPCO'S own report, too. We concluded that we  
24

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25  
26 <sup>21</sup> Id.

27 <sup>22</sup> Id.

28 <sup>23</sup> Id.

1 should have avoided that catastrophic accident, and we could have. We could see  
2 what we should have done. Preventative measures included fitting waterproof seals  
3 on all the doors in the reactor building, or placing an electricity-generating turbine  
4 on the facility's roof, where the water might not have reached it. In addition, wrong  
5 assumptions were made.”<sup>24</sup>

6 133. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
7 of Fukushima prefecture, TEPCO was negligent because they failed to have 12-  
8 volt batteries on the premises at FNPP to provide auxiliary power. TEPCO and  
9 each of the GE DEFENDANTS negligently failed nuclear power plant operation  
10 LESSON NO. 1: Emergency generators should be installed at high elevations or in  
11 watertight chambers. The Isolation Condenser (IC), which relied on convection  
12 and gravity to perform its cooling function, should have helped keep the water  
13 level high in Unit 1's core through the crisis. But operators had turned off the  
14 system just before the tsunami by closing its valves. Thereafter, the electrical  
15 outage prevented the operators from re-opening them to allow for the release of  
16 steam and the flow of cooling water. Workers struggled to manually open the  
17 valves on the IC system.<sup>25</sup> Nuclear-power plants must continuously cool their  
18 unstable, radioactive fuel. These cooling systems run on electricity, which the  
19 plants ordinarily pull from the nation's power grid. If the grid fails, on-site diesel  
20 generators kick on to keep the cooling systems running. If the diesel generators  
21 don't kick on, the plant is in danger of melting down. “There's no doubt TEPCO  
22 should have applied new designs” throughout Fukushima, says Masatoshi Toyota,  
23 88 years old and a retired top TEPCO executive who helped oversee the building  
24

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26 <sup>24</sup> <http://www.theguardian.com/environment/2013/nov/19/uk-government-new-plant-fukushima-nuclear-disaster-warning>

28 <sup>25</sup> <http://spectrum.ieee.org/energy/nuclear/24-hours-at-fukushima>

1 of the reactors. Because TEPCO's first reactor buildings were too small, the  
2 generators had to be located somewhere else. Therefore, engineers located them in  
3 neighboring structures which housed turbines. The reactor buildings were fortress-  
4 like, with thick concrete walls and dual sets of sturdy doors, but the turbine  
5 buildings were far less sturdy, especially their doors. "Backup power generators  
6 are critical safety equipment, and it should've been a no-brainer to put them inside  
7 the reactor buildings," Mr. Toyota says. "It's a huge disappointment that nobody at  
8 TEPCO -including me- was sensitive enough to notice and do something about this  
9 discrepancy."<sup>26</sup>

10 134. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
11 of Fukushima prefecture, TEPCO was negligent because TEPCO was not prepared  
12 with backup power. In the plant's parking lots, workers raised car hoods, grabbed  
13 their car batteries, and lugged them back to the control rooms. They found cables  
14 in storage rooms and studied diagrams. They were vainly hoping if they could  
15 connect the batteries to the instrument panels, they could at least determine the  
16 water levels in the pressure vessels.<sup>27</sup>

17 135. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
18 of Fukushima prefecture, TEPCO and each of the GE DEFENDANTS were  
19 negligent because DEFENDANTS, and each of them, failed nuclear power plant  
20 operation LESSON NO. 2: If a cooling system is intended to operate without  
21 power, make sure all of its parts can be manipulated without power. TEPCO did  
22 have a backup for the emergency generators: power supply trucks outfitted with  
23

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24  
25 <sup>26</sup>

26 <http://online.wsj.com/news/articles/SB10001424052702304887904576395580035>  
27 481822

28 <sup>27</sup> <http://spectrum.ieee.org/energy/nuclear/24-hours-at-fukushima>

1 high-voltage dynamos. That afternoon, emergency managers at TEPCO's Tokyo  
2 headquarters sent 11 power supply trucks racing toward Fukushima Daiichi, 250  
3 km distant. They promptly got stuck in traffic. The roads that were not damaged by  
4 the earthquake or tsunami were clogged with residents fleeing the disaster sites.<sup>28</sup>

5 136. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
6 of Fukushima prefecture, TEPCO and each of the GE DEFENDANTS negligently  
7 designed, maintained, managed, and prepared the reactor buildings, designing and  
8 building them too small to accommodate emergency equipment. In addition, this  
9 emergency equipment was not stored close by, but rather more than 55KM away  
10 from the plant,<sup>29</sup> and therefore TEPCO and each of the other GE DEFENDANTS  
11 failed nuclear power plant operation LESSON NO. 3: Keep power trucks,  
12 generators, and batteries on or very close to the power plant site, a rule so basic  
13 and vital that it should not even have been an issue. The containment vessel, which  
14 surrounds the pressure vessel, is a crucial line of defense: It is a thick steel hull  
15 meant to hold in any tainted materials that have escaped from the inner vessel. At  
16 11:50 p.m., operators in the control room finally connected car batteries to the  
17 pressure gauge for the primary containment vessel. But the gauge revealed that the  
18 containment vessel had already exceeded its maximum operating pressure,  
19 increasing the likelihood that it would leak, crack, or even explode.<sup>30</sup>

21 137. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
22 of Fukushima prefecture, TEPCO was negligent because TEPCO failed nuclear  
23 power plant operation LESSON NO. 4: Install independent and secure battery  
24 systems to power crucial instruments during emergencies. In their initial,  
25

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26 <sup>28</sup> Id.

27 <sup>29</sup> <http://m.youtube.com/results?q=nhk%20fukushima%20documentary&sm=1>

28 <sup>30</sup> <http://spectrum.ieee.org/energy/nuclear/24-hours-at-fukushima>



1 improvised response, the fire crew pumped water into the trucks' storage tanks,  
2 then drove close to the side of the reactor building and injected the water into the  
3 fire protection system's intake lines. It was 5:46 a.m. on March 12 when the first  
4 drops of water sprayed across the molten fuel. Then the workers drove back to the  
5 water tanks and began the slow, arduous operation all over again. Eventually  
6 workers managed to use the fire engines' hoses to connect the water tanks directly  
7 to the intake lines and established a steady flow of water. By mid-afternoon, they  
8 had injected 80,000 liters of water into the pressure vessel using this makeshift  
9 system. But it was too little, too late.<sup>31</sup>

10 138. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
11 of Fukushima prefecture, TEPCO and each of the GE DEFENDANTS were  
12 negligent because DEFENDANTS, and each of them, failed nuclear power plant  
13 operation LESSON NO. 5: Ensure that catalytic hydrogen re-combiners (power-  
14 free devices that turn dangerous hydrogen gas back into steam) are positioned at  
15 the tops of reactor buildings where gas would most likely collect. The workers in  
16 charge of the venting operation took iodine tablets. It was a feeble attempt at  
17 protection against the radiation they'd soon encounter, but it was better than  
18 nothing. They gathered protective head-to-toe suits and face masks connected to  
19 air tanks. At 3:45 a.m., the vent crew tried to measure the radiation dose inside the  
20 reactor building, which had been off limits for 6 hours. Armed with handheld  
21 dosimeters, they opened the air lock, only to find a malevolent white cloud of some  
22 "gaseous substance" billowing toward them. Fearing a radiation steam bath, they  
23 slammed the door shut. They did not get their reading, but they had a good  
24 indication that things had already gone seriously wrong inside the reactor.<sup>32</sup>

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27 <sup>31</sup> Id.

28 <sup>32</sup> Id.

1 139. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
2 of Fukushima prefecture, TEPCO and each of the GE DEFENDANTS were  
3 negligent, because DEFENDANTS, and each of them, failed nuclear power plant  
4 operation LESSON NO. 6: Install power-free filters on vent lines to remove  
5 radioactive materials and allow for venting that won't harm nearby residents. The  
6 failure of reactor 1 made efforts to stabilize the other reactors exponentially more  
7 difficult: Now workers would be laboring in a radioactive hot zone littered with  
8 debris. In addition, when work crews returned to the power truck sometime after  
9 the explosion, they couldn't get the power flowing. So the disaster continued.<sup>33</sup>

10 140. ON MARCH 11, 2011, before the PLAINTIFFS arrived off the coast  
11 of Fukushima prefecture, TEPCO was negligent because TEPCO had a history of  
12 negligently causing other nuclear accidents including, but not limited to, the  
13 following:  
14

- 15 a. 1981: almost 300 workers were exposed to excessive levels of  
16 radiation after a fuel rod ruptured during repairs at the Tsuruga  
17 Nuclear Power Plant.<sup>34</sup>
- 18 b. December 1995: the fast breeder Monju Nuclear Power Plant sodium  
19 leak. State-run operator Donen was found to have concealed videotape  
20 footage that showed extensive damage to the reactor.<sup>35</sup>
- 21 c. March 1997: the Tokaimura nuclear reprocessing plant fire and  
22 explosion, northeast of Tokyo. 37 workers were exposed to low doses  
23

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24  
25  
26 <sup>33</sup> Id.

27 <sup>34</sup> [http://en.wikipedia.org/wiki/Nuclear\\_power\\_in\\_Japan](http://en.wikipedia.org/wiki/Nuclear_power_in_Japan)

28 <sup>35</sup> Id.

1 of radiation. Donen later acknowledged it had initially suppressed  
2 information about the fire.<sup>36</sup>

3 d. In 1999: A fuel loading system malfunctioned at a nuclear plant in  
4 the Fukui Prefecture and set off an uncontrolled nuclear reaction and  
5 explosions.<sup>37</sup>

6 e. September 1999: the critical accident at the Tokai fuel fabrication  
7 facility. Hundreds of people were exposed to radiation; three workers  
8 received doses above legal limits, two of whom later died.<sup>38</sup>

9 f. In 2000: Three Tokyo Electric Power Co. executives were forced to  
10 quit after the company in 1989 ordered an employee to edit out  
11 footage showing cracks in nuclear plant steam pipes in a video being  
12 submitted to regulators.<sup>39</sup>

13 g. August 2002: a widespread falsification scandal started, which led to  
14 the shutdown of all Tokyo Electric Power Company's 17 nuclear  
15 reactors; Tokyo Electric's officials had falsified inspection records and  
16 attempted to hide cracks in reactor vessel shrouds in 13 of its 17  
17 units.<sup>40</sup>

18 h. In 2002: Two workers were exposed to a small amount of radiation  
19 and suffered minor burns during a fire at Onagawa Nuclear Power  
20 Station in northern Japan.<sup>41</sup>

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23 <sup>36</sup> Id.

24 <sup>37</sup> Id.

25 <sup>38</sup> Id.

26 <sup>39</sup> Id.

27 <sup>40</sup> Id.

28 <sup>41</sup> Id.

- 1 i. In August 2004: four workers were killed after a steam explosion at  
2 the Mihama-3 station; the subsequent investigation revealed a serious  
3 lack in systematic inspection in Japanese nuclear plants, which led to  
4 a massive inspection program.<sup>42</sup>
- 5 j. In 2006: A small amount of radioactive steam was released at the  
6 Fukushima Daiichi plant and it escaped the compound.<sup>43</sup>
- 7 k. On July 16, 2007: a severe earthquake (measuring 6.8 on the Richter  
8 scale) hit the region where Tokyo Electric's Kashiwazaki-Kariwa  
9 Nuclear Power Plant is located and radioactive water spilled into the  
10 Sea of Japan; as of March 2009, all of these reactors remain shut  
11 down for damage verification and repairs; the plant with seven units  
12 was the largest single nuclear power station in the world.<sup>44</sup>

13  
14  
15 **DESIGN DEFECTS IN MARK 1 BOILING WATER REACTORS**

16 141. The Fukushima Daiichi nuclear power plant consists of six reactors.  
17 All six reactors were designed by GENERAL ELECTRIC (GE). The architectural  
18 design for GENERAL ELECTRIC'S units was done by DEFENDANT EBASCO.  
19 Units 1 through 5 are based on the flawed Mark I design by these United States  
20 Companies, GE and EBASCO. GE supplied the reactors for Units 1, 2, 3 and 6.  
21 HITACHI and TOSHIBA provided, in collaboration with GE, the reactor for Units  
22 4 and 5. DEFENDANTS TEPCO, GE, EBASCO, HITACHI AND TOSHIBA  
23 have all been involved in maintenance and servicing of the nuclear power plant  
24 during the past decades.

25  
26 <sup>42</sup> Id.

27 <sup>43</sup> Id.

28 <sup>44</sup> Id.

1 142. DEFENDANTS GE, EBASCO, TOSHIBA, and HITACHI  
2 negligently and defectively designed, engineered and constructed the Mark 1  
3 Boiling Water Reactors (“BWR”), creating several manufacturing and design  
4 defects. One design and manufacturing defect of the Mark 1 Boiling Water  
5 Reactors is that the containment vessel, which is supposed to contain radioactive  
6 material, was designed, manufactured and built too small for its purpose. As a  
7 result, the first attempt to ameliorate this defect by all the DEFENDANTS in 1976  
8 was to attach large straps to hold the Torus down against inevitable uplift forces.  
9 The torus is the doughnut shaped structure at the bottom of the containment. The  
10 defectively designed Torus—a water-filled vessel encircling the primary  
11 containment vessel that is used to prevent reactor water from slamming directly  
12 into the reactor core—could potentially jump off the floor when reactor water rushes  
13 back from the steam turbines. Thus, the Torus prevents reactor water from rushing  
14 from the steam turbines directly into the reactor core under high pressure<sup>45</sup>. The  
15 reactor water returning from the steam turbines has a much lower temperature than  
16 the steam leaving at the top of the reactor, and this much cooler water could cause  
17 thermal damage and actual cracking of the reactor fuel rods if it were to impinge  
18 directly onto the reactor core. An additional design defect: the Mark 1 containment  
19 is insufficient to contain radioactive leaks by allowing radioactive materials to leak  
20 into the ground water and into the Pacific Ocean. This reactor was designed to  
21 contain these radioactive materials, and it has failed to do that. This is a fatal  
22 design defect.  
23

24 143. In 1989, due to the likelihood of hydrogen generation, all the  
25 DEFENDANTS attempted a second Band-Aid fix. They installed vents on the side  
26 of the containment vessel to prevent over-pressurization. This installation was  
27

28 <sup>45</sup> <http://www.nytimes.com/2011/03/16/world/asia/16contain.html>

1 another negligent and defective design and construction since the purpose of the  
2 containment is to contain radiation releases in the event of an accident, yet these  
3 vents allow for the release of such radiation. Additionally, once open they are are  
4 liable not to be able to be closed. These vents failed catastrophically three times at  
5 Fukushima Daiichi.

6 144. The Second design and manufacturing defect of the Mark 1 Boiling  
7 Water Reactors is that their control rods<sup>46,47</sup> enter through holes in the floor of the  
8 reactor vessel, presenting a myriad of opportunities for melted core materials to  
9 leak directly onto the containment floor. This is exactly what happened at  
10 Fukushima Daiichi. The BWR design is uniquely prone to melt through because it  
11 is built in a containment that is already inadequate by being too small to contain  
12 normal reactive forces.

13 145. A Third design and manufacturing defect of the Mark 1 Boiling Water  
14 Reactor is the positioning of the spent fuel pools at the top of the reactor buildings.  
15 Three reactor buildings blew up at Fukushima. The reactor buildings have their  
16 fuel pools more than 100 ft in the air, exposing them and releasing radioactive  
17 material directly into the atmosphere.<sup>48</sup> As a result of the hydrogen explosions,  
18 there was no more available containment, directly exposing the spent fuel rods and  
19

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20  
21 <sup>46</sup> Control rods are used for rapid changes to the reactor power (e.g. shutdown and  
22 startup).[http://en.wikipedia.org/wiki/Control\\_rod](http://en.wikipedia.org/wiki/Control_rod).

23 <sup>47</sup> Control rods are used for maintaining the desired state of fission reactions within  
24 a nuclear reactor. They constitute a real-time control of the fission process, which  
25 is crucial for both keeping the fission chain reaction active and preventing it from  
26 accelerating beyond control.

27 <http://large.stanford.edu/courses/2011/ph241/grayson1/themselves>.

28 <sup>48</sup> <https://www.youtube.com/watch?v=GTTNKTThFQ8>

1 making them highly susceptible to an explosion. This scenario was especially  
2 dangerous in the case of reactor 4, as it contained fuel rods equivalent to those of  
3 all the other reactors combined.<sup>49</sup>  
4

5 **SAFETY RELEASE (“SR”) VALVE DESIGN DEFECT CAUSED CHAIN OF**  
6 **MELTDOWNS**

7 146. At Fukushima Daiichi there was a “the chain of meltdowns”, with  
8 Hydrogen explosions at reactors 1 and 3, and then in 2 and 4, one after another.  
9 The explosion in reactor 1 occurred on Saturday March 12, 2014 at 3:36 PM; the  
10 next explosion in reactor 3 took place on Monday March 14, 2014 at 11:01; the  
11 third explosion in reactor 2 was on Tuesday March 15, 2014 at 6:10 and was  
12 followed by the final explosion in reactor 4 later that same day, Tuesday March 15,  
13 2014 at 9:38. This is the first time in history that a meltdown of multiple reactor  
14 cores in succession has occurred.  
15

16 147. A Fourth design and manufacturing defect of the Mark 1 Boiling  
17 Water Reactor that contributed to the chain meltdown was a pipe connecting  
18 reactor 3 and 4. Even though the core had been completely unloaded from reactor  
19 4, the last explosion was due to a build-up of hydrogen, which entered the reactor  
20 via this joint pipe from reactor 3.

21 148. A Fifth design and manufacturing defect of the Mark 1 Boiling Water  
22 Reactor was the failure of the SR valves, each of which failed to open in each of  
23 the reactors, largely contributing to “the chain of meltdowns”. The SR valves are  
24 used to release steam from a reactor when the cooling system breaks down. There  
25 are eight SR valves attached to the outside of each reactor. Had the opportunity  
26 existed of opening even one of these valves, the internal pressure would have been  
27

28 <sup>49</sup> <https://www.youtube.com/watch?v=JMaEjEWL6PU>

1 lowered enough to allow for the necessary and urgent injection of water as a  
2 coolant. Instead, each of the 32 SR valves failed to open.

3 149. The SR valves are located in the primary containment vessel that  
4 houses the reactor, where no one is allowed access, and therefore they must be  
5 opened remotely from the main control room. If the pressure in the containment  
6 vessel surges, the pressure inside the SR valve also goes up, which, in effect,  
7 prevents the valve from opening. The nitrogen pressure line must be greater than  
8 the pressure inside the SR valve in order for it to be able to open the SR valve.  
9 Unless the pressure in the nitrogen valve increases, the pressure from above (inside  
10 the SR valve) will keep the valve from opening. If the SR valves remain closed,  
11 there is no way to prevent a meltdown, and the situation will deteriorate as the  
12 meltdown progresses. This is because the temperature will keep surging, and the  
13 pressure within the primary containment vessel will also continue to rise. The  
14 purported safety mechanism was supposed to prevent a meltdown, and yet it  
15 became less effective as the meltdown worsened. Due to the increase of heat from  
16 the melting fuel, the higher pressure within the primary containment vessel  
17 prevented the SR valves from opening.  
18

19 150. A Sixth design and manufacturing defect of the Mark 1 Boiling Water  
20 Reactor is the failure to design a periodic testing of the SR valves to insure they  
21 would open under different emergent conditions. TEPCO and each of the GE  
22 DEFENDANTS never tested the SR valves under these circumstances. The failure  
23 of the SR Valves caused the Drywell and Suppression Chamber pressures to go  
24 down to zero, resulting in a massive release of radioactive materials.

25 151. A Seventh design and manufacturing defect of the Mark 1 Boiling  
26 Water Reactors is the failure to build into the design of the power plant a storage  
27 facility for auxiliary electric power, including 12-volt batteries, which are highly  
28



1 portable and weigh as little as 10 kilograms. Ten batteries provide enough power to  
2 open an SR valve. In addition to this failure and omission in design by GE,  
3 EBASCO, HITACHI and TOSHIBA, TEPCO failed to prevent a meltdown even  
4 though time was on their side. Operators thought they had the time to prevent a  
5 crisis, but they did not. Two (2)-volt batteries were delivered rather than the  
6 desperately needed 12-volt batteries which had been requested at the onset of the  
7 disaster.

8 152. Atsufumi Yoshizawa, TEPCO's senior official in charge of  
9 procurement, brought forth the excuse that he and his team were not able to  
10 prioritize the request for 12 volt batteries. Such conduct glaringly displays  
11 TEPCO's recklessness and negligence in the training, preparation and response to  
12 a foreseeable disaster such as a nuclear meltdown: "People responding to the  
13 disaster needed all kinds of things, we were trying to juggle all of the requests at  
14 the same time trying to get them delivered as quickly as we could, we didn't have  
15 time to prioritize. We just tried to grab whatever was on the list regardless of  
16 quantity...I believe we were in a situation where screening each request according  
17 to priority was very difficult." This chaotic and ill-designed approach to providing  
18 essential materials worsened the disaster. The workers at Fukushima were left  
19 without the necessary batteries to prevent a meltdown. On March 13, 2011, the day  
20 after the USS Reagan and the PLAINTIFF Sailors arrived, the radiation rate at the  
21 main gate rose to 281 microSieverts/hour, at which rate the annual exposure rate  
22 would be reached in four hours, at this dangerous and inappropriate level. The 12-  
23 volt batteries TEPCO had procured were at a stock plant more than 55KM away  
24 from the plant...there were over 1,000 of them, unavailable when desperately  
25 needed. There were also small generators and pumps stranded at the distribution  
26  
27  
28

1 center, but no plan or adequate training existed to ensure their transport to the  
2 contaminated plant.<sup>50</sup>

3 153. An Eighth design and manufacturing defect of the Mark 1 Boiling  
4 Water Reactor is the failure to build into the design Isolation Condensers which  
5 will operate continuously. The Reactors were equipped with two isolation  
6 condensers for cooling. They were designed to continue cooling without power,  
7 once engaged. Hot steam from the reactor cools and condenses as it passes through  
8 a tank of water. At the time of the meltdown, TEPCO workers had been operating  
9 the machinery at intervals: That is, turning the machinery on and off, repeatedly.  
10 The machinery happened to be in the idle position when the plant lost power. From  
11 that point on, the reactor (#1) headed into meltdown, about 4 hours after the quake  
12 and tsunami. Rapid cooling could damage the reactor, so they turned the cooling  
13 system on and off at intervals. In the confusion, the operators forgot that they had  
14 turned the isolation condensers off before the loss of power. When the power went  
15 out, the operators in the main control center could not tell if the cooling system  
16 was operating or not, since the indicators are lights powered by electricity, with no  
17 back up or auxiliary power-another design defect. Operators mistakenly and  
18 negligently assumed that the Isolation Condensers were operating and providing  
19 cooling after the power outage. TEPCO communicated falsely to the public that  
20 reactor 1 was safe and that the Isolation Condensers were operating 5.5 hours after  
21 the power loss.  
22

23 154. A Ninth design and manufacturing defect of the Mark 1 Boiling Water  
24 Reactors is the failure to build into the design a periodic testing of the Isolation  
25  
26  
27

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28 <sup>50</sup> <http://m.youtube.com/results?q=nhk%20fukushima%20documentary&sm=1>

1 Condensers.<sup>51</sup> None of the DEFENDANTS had ever tested the Isolation  
2 Condensers in 40 years. TEPCO operators twice missed obvious signs that the  
3 Isolation Condensers were not working: (1) One hour after the power outage, the  
4 water level gauges came back online and it became apparent that the water level  
5 had dropped two meters in one hour. The operators in the quake proof room  
6 calculated that it was only going to take another hour until the water dropped down  
7 to the top of active fuel. Failing to verify that the condensers were on, and indeed  
8 cooling the reactor without power as they are designed to do was a major design  
9 and manufacturing defect in training and preparation for emergency situations as  
10 presented. (2) Operators observed only “faint” steam coming out of the “pig nose”,  
11 the two release valves of the condensers. This phenomenon indicates that the  
12 condensers are failing, compared to the blast of a major rush/cloud of steam when  
13 they are functioning properly and provide cooling to the reactor. Faint steam  
14 emerges two to three hours after the condensers have been turned off. This  
15 indicates that the condensers had not been working for a full three hours. Each one  
16 of the DEFENDANTS negligently failed to activate and test the Isolation  
17 Condensers in Reactor 1 for about 40 years. Consequently, none of the operators  
18 had ever seen or even been briefed on what kind of steam should be visible when  
19 the condensers are turned on. In comparison, at the Nine Mile Point Nuclear Plant  
20 in the U.S., located in the Town of Scriba, approximately five miles northeast of  
21

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22  
23 <sup>51</sup> An Isolation Condenser is a heat exchanger located above containment in a pool  
24 of water open to atmosphere. In operation, decay heat boils steam, which is drawn  
25 into the heat exchanger and condensed; then it falls by weight of gravity back into  
26 the reactor. This process keeps the cooling water in the reactor, making it  
27 unnecessary to use powered feed-water pumps.

28 [http://en.wikipedia.org/wiki/Boiling\\_water\\_reactor\\_safety\\_systems](http://en.wikipedia.org/wiki/Boiling_water_reactor_safety_systems)

1 Oswego, New York, the Mark 1 reactors are put through a start-up test every four  
2 years. Additionally, even if the Isolation Condensers had been online and  
3 functioning, they would not have prevented the meltdowns because there were  
4 ruptures in the reactor piping, which was draining all the reactor water out of the  
5 reactor vessel. The Isolation Condensers can only function properly when there is  
6 proper water-tight integrity within the reactor piping system; but with leaks in the  
7 reactor piping and the operators unable to keep sufficient water in the reactor  
8 vessels, the Isolation Condensers are rendered ineffective.

9 155. A Tenth design and manufacturing defect of the Mark 1 Boiling  
10 Water Reactors was that each and all of the GE DEFENDANTS reduced the height  
11 of the cliff on which the plant was built. All of the DEFENDANTS failed to  
12 understand and consider this most devastating and egregious oversight: Originally,  
13 in 1960, the cliff at Fukushima Daiichi was 35 meters high (about 115 feet), a  
14 buffer from the sea. The engineers at GE and EBASCO reduced this natural barrier  
15 to 10 meters, making it a 30-foot cliff. “Tsunami” is a Japanese word derived from  
16 “Tsu” meaning harbor; and “Nami” meaning waves. The entire ocean rises up. On  
17 a boat at sea one is not aware of a tsunami because the entire ocean rises up.  
18 However, when a tsunami hits a harbor, it travels at close to the speed of sound and  
19 has enormous destructive power.

21 156. All of the DEFENDANTS knew that tsunamis, all through history,  
22 have periodically hit the coast of Japan. In 1896, there was a 40-meter high  
23 tsunami. In 1923, there was a 13-meter tsunami. In 1933, there was a 28-meter  
24 tsunami, the most deadly before the Daiichi tsunami. In 1944, there was a 12-meter  
25 tsunami. In 1946, there was another 12-meter tsunami. In 1954 and 1955, 10 years  
26 before Fukushima Daiichi was designed, there were 3 tsunamis, and all of them  
27  
28

1 were over 13 meters. None of the DEFENDANTS could claim ignorance of the  
2 height of previous tsunamis.

3 157. The tsunami that hit Fukushima Daiichi in 2011 was just a middle-of-  
4 the-road tsunami compared to the hundred years of history before it. Yet, in spite  
5 of that history and knowledge, the tsunami wall was built by the DEFENDANTS  
6 at a mere 4 meters, and later raised to a barely higher 5.7 meters. The 14 meter  
7 (46 ft) high tsunami overwhelmed the plant's 5.7 meter high seawall. The tsunami  
8 water flooded the low-lying rooms in which the emergency generators were  
9 housed. The diesel generators were quickly flooded and then began to fail soon,  
10 their job being taken over by emergency battery-powered systems. When the  
11 batteries for the emergency system ran out the next day, on March 12, the active  
12 cooling systems stopped, and the reactors began to heat up. The power failure also  
13 initiated the failure of many of the vital reactor control instruments.  
14

15 158. All of the DEFENDANTS defectively reasoned that the lowered  
16 height of the sea wall would keep the operating costs of the seawater pumps low.  
17 And lowering the bluff was to allow the base of the reactors to be constructed on  
18 solid bedrock in order to mitigate the threat posed by earthquakes. The  
19 DEFENDANTS' defective design of lowering the site's elevation increased the  
20 reactor's vulnerability to a tsunami larger than anticipated in the design of the  
21 reactor. This was a catastrophic and preventable design defect since there had  
22 clearly been many tsunamis far higher, evidence the DEFENDANTS completely  
23 ignored in their planning.

24 159. An Eleventh design and manufacturing defect of the Mark 1 Boiling  
25 Water Reactors is that the GE DEFENDANTS designed and placed the emergency  
26 power diesel generators in the basement, and not even within any sort of  
27 waterproof container. Consequently, when the tsunami hit, the emergency power  
28

1 diesel generators were flooded. The emergency pumps, also called service water  
2 pumps, were placed in a location where they ended up under water. And finally,  
3 the diesel tanks were placed in a location where they too were flooded. In addition,  
4 the service water pumps had to be at the water, but they were so badly designed  
5 that in any tsunami they would be flooded. So essentially it doesn't matter that the  
6 diesels were in the basement.

7 160. A Twelfth design and manufacturing defect of the Mark 1 Boiling  
8 Water Reactors is that each and every one of the GE DEFENDANTS failed to  
9 design and build a fraud-proof system that oversees inspection and repair reports in  
10 order to ensure compliance with safety standards and guidelines. On Feb 28, 2011,  
11 TEPCO submitted a report to the Japanese Nuclear and Industrial Safety Agency,  
12 admitting that the company had previously submitted fake inspection and repair  
13 reports. The report revealed that TEPCO failed to inspect more than 30 technical  
14 components of the six reactors, including power boards for the reactor's  
15 temperature control valves, as well as components of the cooling systems such as  
16 water pump motors and emergency power diesel generators. In 2008, the IAEA  
17 (International Atomic Energy Agency) warned TEPCO that the FNPP was built  
18 using outdated safety guidelines and could be a "serious problem" during a large  
19 earthquake.  
20

21 161. A Thirteenth design and manufacturing defect is the failure by all of  
22 the GE DEFENDANTS to design an emergency back-up manual cooling system in  
23 order to allow fresh water to be pumped directly into the reactors by fire hoses.  
24 TEPCO's workers attempted to inject water from fire trucks into piping leading to  
25 the reactor, only to discover, after hours into this failed effort, that 55 percent of  
26 the water they injected was being diverted into auxiliary pipes. Consequently, the  
27 meltdown raged unabatedly because the injected water never reached the targeted  
28

1 reactor as it was actively melting down. This design defect was also magnified by  
2 the failure of TEPCO and the GE DEFENDANTS to provide adequate training at  
3 periodic intervals. The workers who were attempting to inject water from the fire  
4 trucks had an utter lack of understanding of the piping system, as well as a lack of  
5 training. None of the workers had ever practiced any of these emergency  
6 procedures.

7 **DEFENDANTS' PRIOR KNOWLEDGE OF DESIGN DEFECTS**

8 162. The GE DEFENDANTS, and TEPCO, and each of them, at all times  
9 before the PLAINTIFFS arrived off the coast of Fukushima Prefecture to provide  
10 rescue and humanitarian assistance, knew of the design and manufacturing defects  
11 and intentionally, recklessly and negligently failed to take corrective and remedial  
12 action for the protection of the public, including the PLAINTIFF U.S. Sailors,  
13 foreseeable rescuers. Mitsuhiko Tanaka, a former engineer with HITACHI, says  
14 the company covered up faults in the pressure vessel it produced for Fukushima's  
15 reactor 4. When Tanaka tried to make this information public after the Chernobyl  
16 disaster in 1986, HITACHI threatened him, warning, "Think of your family."  
17 Tanaka says other engineers in Japan were also concerned about the reactor's  
18 safety.<sup>52</sup>

19  
20 163. GE DEFENDANTS, and TEPCO, and each of them, knew that FNPP,  
21 like the other oldest nuclear plants in operation today, the GE Mark 1 boiling water  
22 reactors, was vulnerable to catastrophic accidents due to a flawed reactor  
23 containment structure. GE DEFENDANTS, and TEPCO, and each of them, have  
24 known since the early 1970s that the Mark 1 BWR could likely explode during a  
25

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26 <sup>52</sup> [http://www.greenpeace.org/canada/en/campaigns/Energy/end-the-nuclear-  
threat/Resources/Background-documents/QA-GE-Hitachis-role-in-the-Fukushima-  
disaster-in-Japan/](http://www.greenpeace.org/canada/en/campaigns/Energy/end-the-nuclear-<br/>27 threat/Resources/Background-documents/QA-GE-Hitachis-role-in-the-Fukushima-<br/>28 disaster-in-Japan/)

1 meltdown, releasing massive quantities of toxic radiation and radioactive particles,  
2 endangering the lives of millions of people and making large areas of land  
3 uninhabitable for generations to come.

4 164. GENERAL ELECTRIC, whose motto in the 1960's was, "Progress is  
5 our most important product", announced in 1961: "We're going to ram this nuclear  
6 thing through". Their chairman is quoted as saying that, and ram it through they  
7 did. GE threatened to go out of business unless the Mark 1 design was continued.  
8 Scientists in the United States, in 1965, recognized that this Mark 1 design had  
9 flaws, and as Dr. Okrent, a scientist, said, "I think it was kind of a threat".  
10 Engineers at GE resigned because they "didn't have the power to stop GE's faulty  
11 design in 1966!" The turmoil that GE willfully chose to avoid in 1972 became the  
12 turmoil Fukushima Daiichi experienced 40 years later. Essentially the fuse was lit  
13 on Fukushima Daiichi in 1970, and it exploded on March 11, 2011.

14 165. Thirty-five years ago, Dale G. Bridenbaugh and two of his colleagues  
15 at General Electric resigned from their jobs after becoming increasingly convinced  
16 that the nuclear reactor design they were reviewing-the Mark 1-was so flawed that  
17 it could lead to a devastating accident. Questions persisted for decades about the  
18 ability of the Mark 1 to handle the immense pressures that would result if the  
19 reactor lost cooling power. As early as the 1970s, its own engineers, e.g. Dale G.  
20 Bridenbaugh, warned GE about critical flaws in the design of some reactors when  
21 they were being built in Fukushima. These are the same flaws in the design of the  
22 reactor Mark I, the same defects which have contributed to the radioactive  
23 contamination after the tsunami. GE, EBASCO, HITACHI and TOSHIBA built  
24 five Mark I reactors at Fukushima Daiichi, and 4 of them failed on March 11,  
25 2011.  
26  
27  
28



1 166. GE never made any serious effort to revise the design and tackle the  
2 safety flaws of those reactors. In addition, GE did not even bother to properly  
3 incorporate Japanese anti-seismic standards to the Mark I construction. Dale G.  
4 Bridenbaugh stated: “The problems we identified in 1975 were that, in planning  
5 the design of the containment, they did not take into account the dynamic loads  
6 that could be experienced with a loss of coolant. “The impact loads the  
7 containment would receive by this very rapid release of energy could tear the  
8 containment apart and create an uncontrolled release.” In addition, the Mark I  
9 included an absolutely insane design element: storing huge quantities of  
10 radioactive fuel rods 100 feet up in the air.<sup>53</sup>

11 167. In 1972, Stephen H. Hanauer, then a safety official with the Atomic  
12 Energy Commission, recommended that the Mark I system be discontinued  
13 because it presented unacceptable safety risks. Among the concerns cited was the  
14 smaller containment design, which was more susceptible to explosion and rupture  
15 from a build-up in hydrogen: the exact situation that unfolded at the Fukushima  
16 Daiichi plant. Later that same year, Joseph Hendrie, who would later become  
17 chairman of the Nuclear Regulatory Commission, a successor agency to the  
18 Atomic Commission, said the idea of a ban on such systems as the Mark I was  
19 attractive.  
20

21 168. In 1986, Harold Denton, then the NRC's top safety official, told an  
22 industry trade group, “The Mark I containment, especially being smaller with  
23 lower design pressure, in spite of the suppression pool, if you look at the WASH  
24

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25  
26 <sup>53</sup> [http://www.globalresearch.ca/fukushima-general-electric-knew-its-nuclear-  
27 reactor-design-was-unsafe-so-why-isnt-ge-getting-any-heat-for-  
28 fukushima/5361300?print=1](http://www.globalresearch.ca/fukushima-general-electric-knew-its-nuclear-reactor-design-was-unsafe-so-why-isnt-ge-getting-any-heat-for-fukushima/5361300?print=1)

1 1400 safety study, you'll find something like a 90% probability of that containment  
2 failing.”

3 **DESIGN DEFECTS WERE COST CUTTING**

4 169. Interviews with a dozen current and former senior Tokyo Electric  
5 Power engineers, including several who were intimately involved when the fateful  
6 design decisions were made in the 1960's and 1970's, reveal that all the GE  
7 DEFENDANTS, and TEPCO had many opportunities over the decades to retrofit  
8 the oldest reactors. The engineers blame a combination of complacency and cost-  
9 cutting pressures. All the Reactors in the Fukushima plant were based on the GE  
10 designs. GE maintained lucrative contracts to service GE reactors in Japan and was  
11 engaged with partner HITACHI Ltd.

12 170. To keep the reactor compact and economical, EBASCO made the  
13 reactor building too small, said Mr. Toyota, the engineer who helped to oversee the  
14 construction. “Backup power generators are critical safety equipment, and it  
15 should've been a no-brainer to put them inside the reactor buildings,” Mr. Toyota  
16 says. “It's a huge disappointment that nobody at TEPCO- including me-was  
17 sensitive enough to notice and do something about this discrepancy.”

18 171. Another TEPCO engineer who visited the Fukushima Daiichi plant  
19 many times, starting in the 1970's, says the cramped reactor buildings barely  
20 allowed room to install a valve during routine work. “It was super-inefficient,” this  
21 engineer says. “Some of us knew all along and were concerned about the  
22 inconsistent placements of diesel generators at Fukushima Daiichi between reactor  
23 No. 6 and the older reactors 1 through 5, and their potential vulnerability,” says  
24 one of TEPCO's top engineers who has guided the company's nuclear division.  
25 The engineer says that when he was preparing for a regularly scheduled  
26  
27  
28

1 government inspection in 1987, the inconsistent placement of the backup  
2 generators “stood out like a sore thumb.”

3 172. Says Mr. Toyota, the former TEPCO executive: “Over the years, a lot  
4 of engineers have come up with different ideas to improve safety. But my guess is  
5 that they couldn’t come forward and point their ideas out to management because  
6 of the high costs associated with back-fitting older reactors with new designs.”

7 173. Warnings and design critique: In 1990, the U.S. Nuclear Regulatory  
8 Commission (NRC) ranked the failure of the emergency electricity generators and  
9 subsequent failure of the cooling systems of plants in seismically very active  
10 regions as one of the most likely risks. The Japanese Nuclear and Industrial Safety  
11 Agency (NISA) cited this report in 2004. According to Jun Tateno, a former NISA  
12 scientist, TEPCO did not react to these warnings and did not respond with any  
13 measures.

14 174. Safety is a non-delegable duty. The GE DEFENDANTS are  
15 responsible for each and every design and manufacturing defect and all design  
16 flaws at the Fukushima reactors, including the design defect of the location of  
17 emergency diesel generators at the Fukushima Nuclear-power plants which must  
18 continuously cool their unstable, radioactive fuel. These cooling systems run on  
19 electricity, which the plant ordinarily pulls from the nation’s power grid. If the grid  
20 fails, on-site diesel generators kick on to keep the cooling systems running. If these  
21 generators don’t work, the plant is then in immediate danger of melting down.  
22 Because TEPCO’s first reactor buildings were designed and built too small, the  
23 generators had to be stored somewhere else. Engineers put them into neighboring  
24 structures that house turbines and are neither sturdy nor water-tight..

25 175. In the case of Fukushima’s Unit 1, during the loss of coolant on  
26 March 11, 2011, the pressure inside the containment vessels exceeded their design  
27  
28

1 capacity almost up to twice. In 1976, GE DEFENDANTS, and TEPCO knew that  
2 the Mark 1 system had not been designed to withstand the accident it was supposed  
3 to contain. In 2011, reactors 1, 2, and 3 were operating at the time and blew up,  
4 spewing radiation worldwide. Radioactive cesium, strontium, iodine, and hot  
5 particles including molten uranium, from the four reactors spread all over Northern  
6 Japan, and the resulting radioactive plume blew across the ocean and was  
7 measured around the world.  
8

### 9 **RADIOACTIVE CANCER-CAUSING RELEASES PREVENTABLE**

10 176. This is the worst industrial accident in the history of the world, and is  
11 largely due to inherent design flaws, inaccurate risk assumptions, and the failure of  
12 every safety system designed to operate in such an event. This tragedy WAS  
13 preventable. Corporate financial goals, world politics and engineering hubris put  
14 money and power before the lives and health of people who farm, fish, and live...  
15 affecting them and foreseeable rescuers, including the U. S. Sailors-for hundreds of  
16 years. The areas around the plant, including the Pacific Ocean, are contaminated to  
17 a point that could not be imagined; no method of mitigation exists. The Fukushima  
18 Daiichi site will continue to bleed radiation into the Pacific for 100 years or  
19 longer.<sup>54</sup>  
20

21 177. The initial nuclear meltdown from the Fukushima reactors released  
22 several radioactive isotopes, such as **iodine-131**, **cesium-134** and **cesium-137** and  
23 **strontium-90**. **Cesium-137** has a half-life of 30 years and remains in the  
24 environment for decades. Nuclear fuel is loaded with noble gases. The noble gases,  
25 such as xenon or krypton, are called noble because they don't react with anything.  
26

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27 <sup>54</sup> [http://investigations.nbcnews.com/\\_news/2011/03/13/6256121-general-electric-](http://investigations.nbcnews.com/_news/2011/03/13/6256121-general-electric-designed-reactors-in-fukushima-have-23-sisters-in-us)  
28 [designed-reactors-in-fukushima-have-23-sisters-in-us](http://investigations.nbcnews.com/_news/2011/03/13/6256121-general-electric-designed-reactors-in-fukushima-have-23-sisters-in-us)

1 All the noble gases were released. The data indicates that the concentration of  
2 xenon in Chiba-which is a noble gas-was 400,000 times more than normal  
3 immediately after the accident. Also, that the concentration of xenon in Chiba was  
4 1,300 Becquerels per cubic meter for 8 days. A cubic meter is 3 feet by 3 feet by 3  
5 feet, and inside every cubic meter of air over Chiba, there were 1,300  
6 disintegrations emitting radioactivity every second, for 8 days and each and every  
7 disintegration releases a radiation particle or gamma ray. What were these people  
8 breathing? Noble Gases, which can't be monitored now; they are gone.

9 178. This data was just recently released by FNPP. There were 4 radiation  
10 detectors that continued to work after the Daiichi accident. Almost all of them  
11 didn't have power, but a couple of them were battery powered, and TEPCO just  
12 recently discovered the data. Normal background on these radiation detectors was  
13 about 0.04 microsieverts. At 5 o'clock in the morning, right after the accident, the  
14 radiation in the detectors was 10 times greater than background. At 6 o'clock, 60  
15 times background. At 9 o'clock, 150 times background. 10 o'clock, 700 times  
16 background. This means that people in the vicinity of these radiation detectors  
17 were getting a yearly dose in 12 hours. Then the vents were open. So this is a clear  
18 indication that the containments were leaking well before the vents were open. At  
19 3 o'clock, the same detectors were measuring 30,000 times background. That  
20 means a yearly dose in ten minutes for the people near FNPP. It is also important  
21 to realize this may not have been the worst. This happens to be where the detector  
22 was. But it doesn't mean that the main plume chose to go to the detector and get  
23 that reading.

24 179. Five (5) soil samples and a piece of pavement from a children's park  
25 right next to a school were analyzed by Marco Kaltoven at Worcester Polytech.  
26 Each of the samples exceeded 7,000 Becquerels per kg. This means that in a two  
27  
28

1 pound box of sample there were 7,000 disintegrations per second of cesium in  
2 Tokyo-more than a hundred miles away from the accident. 7,000 becquerels/kg  
3 qualifies as radioactive waste in the United States.

4 180. When compared to Chernobyl, the total available cesium at Chernobyl  
5 was 2.9 petabecquerels or pbecquerels, with 17 zeros behind it, of cesium  
6 (290,000,000,000,000,000 counts per minute of cesium). There was almost three  
7 times more cesium available to be released at Daiichi 1, 2 and 3. The releases of  
8 noble gases at Fukushima were 3 times the releases of Chernobyl, and the  
9 containment leak rate was 300% per day, that's an NRC number, and the  
10 decontamination for cesium was zero. Nothing was getting filtered out, or scrubbed  
11 out in the suppression pool, recombiners, or vent stack filters. "TEPCO says a  
12 groundwater sample taken from a well at the Fukushima No. 1 nuclear plant last  
13 July contained a record high 5 million becquerels per liter of radioactive strontium-  
14 90."<sup>55</sup> PLAINTIFF U. S. Sailors were trapped in the prevailing wind blowing out  
15 to sea, carrying the deadly plume of all these radioactive particles.  
16

17 181. The radioactive liquid releases will continue for years and years into  
18 the future. The liquid releases are 10 times the amounts of Chernobyl. On July 11,  
19 2014, Environmental Science & Technology, an authoritative source of  
20 information for professionals in a wide range of environmental disciplines,  
21 published: The Novel Insights into Fukushima Nuclear Accident from Isotopic  
22 Evidence of Plutonium Spread along Coastal Rivers. The results of this  
23 organization's study "indicated the presence of Plutonium ("Pu") from FNPP, in  
24 slight excess compared to the Pu background from global fallout.... These results  
25 demonstrate that this radionuclide has been transported relatively long distances (~  
26

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27 <sup>55</sup> [http://www.japantimes.co.jp/news/2014/02/07/national/record-strontium-90-](http://www.japantimes.co.jp/news/2014/02/07/national/record-strontium-90-level-in-fukushima-groundwater-sample-last-july/#.U_ONilh0yM8The)  
28 [level-in-fukushima-groundwater-sample-last-july/#.U\\_ONilh0yM8The](http://www.japantimes.co.jp/news/2014/02/07/national/record-strontium-90-level-in-fukushima-groundwater-sample-last-july/#.U_ONilh0yM8The)

1 45 km) from FNPP and has been deposited in rivers, representing a potential  
2 source of Pu to the ocean.”<sup>56</sup>

3 182. In a leaked TEPCO report dated June 2011, it was revealed that  
4 plutonium-238, -239,-240, and -241 were released "to the air" from the site during  
5 the first 100 hours after the earthquake, the total amount of plutonium said to be  
6 120 billion becquerels (120 GBq)-perhaps as much as 50 grams. The same paper  
7 mentioned a release of 7.6 trillion becquerels of neptunium-239-about 1 milligram.  
8 As neptunium-239 decays, it becomes plutonium-239. TEPCO made this report for  
9 a press conference on 6 June 2011. Plutonium-239 is particularly long-lived and  
10 toxic with a half-life of 24,000 years and remains hazardous for tens of thousands  
11 of years. The isotope iodine-131 is easily absorbed by the thyroid. Persons exposed  
12 to releases of I-131 from any source have a higher risk for developing thyroid  
13 cancer or thyroid disease, or both. Iodine-131 has a short half-life at approximately  
14 8 days. Caesium-137 is also a particular threat because it behaves like potassium  
15 and is taken up by cells throughout the body. Additionally, it has a long, 30-year  
16 half-life. Cs-137 can cause acute radiation sickness, and increases the risk for  
17 cancer because of exposure to high-energy gamma radiation. Internal exposure to  
18 Cs-137, through ingestion or inhalation, allows the radioactive material to be  
19 distributed in the soft tissues, especially muscle tissue, exposing these tissues to the  
20 beta particles and gamma radiation and increasing cancer risk.

22 183. Strontium-90 behaves like calcium, and tends to deposit in bone and  
23 blood-forming tissue (bone marrow). 20–30% of ingested Sr-90 is absorbed and  
24 deposited in the bone. Internal exposure to Sr-90 is linked to bone cancer, cancer  
25

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27 <sup>56</sup> <http://pubs.acs.org/doi/abs/10.1021/es501890n>, (Environ.  
28 Sci. Technol., Article ASAP, DOI: 10.1021/es501890n)

1 of the soft tissue near the bone, and leukemia. The risk of cancer increases with  
2 increased exposure to Sr-90.<sup>57</sup>

3 184. The radioactive isotopes from the FNPP have already reached North  
4 America. Two radioactive cesium isotopes, cesium-134 and cesium-137, have been  
5 detected offshore Vancouver, British Columbia<sup>58</sup>

6 **DESIGN CONTENT OF THE MARK I BOILING WATER REACTOR:**

7 185. The Fukushima Daiichi reactors are GE boiling water reactors (BWR)  
8 of an early (1960s) design supplied by DEFENDANTS GE, EBASCO, TOSHIBA  
9 and HITACHI, with what is known as a Mark I containment. Reactors 1-3 came  
10 into commercial operation from 1971-75. Reactor power is 460 MWe for unit 1,  
11 784 MWe for units 2-5, and 1100 MWe for unit 6. The fuel assemblies are about 4  
12 m long, and there are 400 fuel rods in unit 1; 548 in units 2-5; and 764 in unit 6.  
13 Each assembly has 60 fuel rods containing the uranium oxide fuel within  
14 zirconium alloy cladding. Unit 3 has a partial core of mixed-oxide (MOX) fuel (32  
15 MOX assemblies, 516 LEU). They all operate normally at 286°C at core outlet  
16 under a pressure of 6930 kPa and with 115-130 kPa pressure in dry containment.  
17 The four reactors all began operation in the 1970s. Units 1, 3 and 4 were built by  
18 DEFENDANTS GE and EBASCO, TOSHIBA and HITACHI, while Unit 2 was a  
19 joint GE-TOSHIBA project.  
20

21  
22  
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24 

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<sup>57</sup>

25 [http://en.wikipedia.org/wiki/Radiation\\_effects\\_from\\_the\\_Fukushima\\_Daiichi\\_nuclear\\_disaster](http://en.wikipedia.org/wiki/Radiation_effects_from_the_Fukushima_Daiichi_nuclear_disaster)

26  
27 <sup>58</sup> <http://www.scientificamerican.com/article/radioactive-isotopes-from-fukushima-meltdown-detected-near-vancouver/>  
28



<u>Reactor</u>	<u>Design</u>	<u>Size</u>	<u>Commercial Operation</u>
Fukushima I-1	General Electric Mark I BWR	439MW	March 1971
Fukushima I -2	General Electric Mark I BWR	760 MW	July 1974
Fukushima I - 3	General Electric Mark I BWR	760 MW	March 1976
Fukushima I - 4	General Electric Mark I BWR	760 MW	October 978
Fukushima I - 5	General Electric Mark I BWR	760 MW	April 1978
Fukushima I - 6	General Electric Mark II BWR	1067 MW	October 979 <sup>59</sup>

### **DEFENDANTS PLACED MARK 1 INTO STREAM OF COMMERCE**

186. Today, in the United States, there are 23 aging Mark 1 reactors identical to Fukushima, including Vermont Yankee on the Connecticut River in Vermont. These plants pose a particular hazard with their over-crowded, high-level nuclear waste spent fuel pools that are not in hardened containment structures, making them vulnerable to natural disasters and terrorist attacks. These highly poisonous nuclear waste materials need to be kept out of the environment for 250,000 years.<sup>60</sup> There are 23 BRW Nuclear Power Plants in the United States and 10 additional around the world, similar in design to those at FNPP.

187. The NRC database of nuclear power plants shows that 23 of the 104 nuclear plants in the U.S. are GE boiling-water reactors with GE's Mark I systems for containing radioactivity, the same containment system used by the Reactors at the Fukushima Daiichi plant. The location of the U.S. GE Mark 1 reactors are as follows:

<sup>59</sup> <http://www.scribd.com/doc/50550192/NIRS-Fact-Sheet-on-Fukushima-Nuclear-Power-Plant>

<sup>60</sup> <http://www.fairewinds.org/japan-friends-tv-documentary-10-pm-june-1-japan/>

- 1 1. Browns Ferry 1, Athens, Alabama, operating license since 1973, reactor  
2 type GE 4.
- 3 2. Browns Ferry 2, Athens, Alabama, 1974, GE 4
- 4 3. Browns Ferry 3, Athens, Alabama, 1976, GE 4.
- 5 4. Brunswick 1, Southport, North Carolina, 1976, GE 4.
- 6 5. Brunswick 2, Southport, North Carolina, 1974, GE 4.
- 7 6. Cooper, Brownville, Nebraska, 1974, GE 4.
- 8 7. Dresden 2, Morris, Illinois, 1970, GE 3.
- 9 8. Dresden 3, Morris, Illinois, 1971, GE 3.
- 10 9. Duane Arnold, Palo, Iowa, 1974, GE 4.
- 11 10. Fermi 2, Monroe, Michigan, 1985, GE 4.
- 12 11. FitzPatrick, Scriba, New York, 1974, GE 4.
- 13 12. Hatch 1, Baxley, Georgia, 1974, GE 4.
- 14 13. Hatch 2, Baxley, Georgia, 1978, GE 4.
- 15 14. Hope Creek, Hancock's Bridge, New Jersey, 1986, GE 4.
- 16 15. Monticello, Monticello, Minnesota, 1970, GE 3.
- 17 16. Nine Mile Point 1, Scriba, New York, 1969, GE 2.
- 18 17. Oyster Creek, Forked River, New Jersey, 1969, GE 2.
- 19 18. Peach Bottom 2, Delta, Pennsylvania, 1973, GE 4.
- 20 19. Peach Bottom 3, Delta, Pennsylvania, 1974, GE 4.
- 21 20. Pilgrim, Plymouth, Massachusetts, 1972, GE 3.
- 22 21. Quad Cities 1, Cordova, Illinois, 1972, GE 3.
- 23 22. Quad Cities 2, Moline, Illinois, 1972, GE 3.
- 24 23. Vermont Yankee, Vernon, Vermont, 1972, GE 461

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27 <sup>61</sup> [http://investigations.nbcnews.com/\\_news/2011/03/13/6256121-general-electric-](http://investigations.nbcnews.com/_news/2011/03/13/6256121-general-electric-designed-reactors-in-fukushima-have-23-sisters-in-us)  
28 [designed-reactors-in-fukushima-have-23-sisters-in-us](http://investigations.nbcnews.com/_news/2011/03/13/6256121-general-electric-designed-reactors-in-fukushima-have-23-sisters-in-us)

## **HOW BWR PRODUCES ELECTRICITY:**

188. The Boiling Water Reactor (BWR for short) produces electricity by boiling water, and spinning a turbine with that steam. The nuclear fuel heats water, the water boils and creates steam, the steam then drives turbines that create the electricity, and the steam is then cooled and condensed back to water, and the water returns to be heated by the nuclear fuel. The reactor operates with the nuclear fuel that is uranium oxide. Uranium oxide is a ceramic with a very high melting point of about 2800 °C. The fuel is manufactured in pellets (cylinders that are about 1 cm tall and 1 cm in diameter). These pellets are then put into a long tube made of Zircaloy (an alloy of zirconium) with a failure temperature of 1200 °C (caused by the auto-catalytic oxidation of water), and sealed tight. This tube is called a fuel rod. These fuel rods are then put together to form assemblies, several hundred of which make up the reactor core. The solid fuel pellet (a ceramic oxide matrix) is the first barrier that retains many of the radioactive fission products produced by the fission process. The Zircaloy casing is the second barrier to release that separates the radioactive fuel from the rest of the reactor. The core is then placed in the pressure vessel. The pressure vessel is a thick steel vessel that operates at a pressure of about 7 MPa<sup>62</sup>(1000 psi), and is designed to withstand the high pressures that may occur during an accident. The pressure vessel is the third barrier to radioactive material release.

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<sup>62</sup> Megapascal (MPa) is a metric pressure unit and equals to 1 000 000 force of newton per square meter which is known as a Pascal. Pound-per-square-inch (abbreviated as PSI) is a unit of pressure, which measures the quantity of pressure per square inch of area. It is defined as the pressure of a force of 1 pound applied homogeneously above an area of 1 sq inch. Pound or pound force per square inch (psi, pfsi, lb/in<sup>2</sup>, or lbf/in<sup>2</sup>) is a commonly used British plus American unit of measurement for pressure. (1 psi = 6,894.76 Pascal)  
<http://convertmpatopsi.com/Pound-per-square-inch-psi.html>

1 189. The entire primary loop of the nuclear reactor-the pressure vessel,  
2 pipes, and pumps that contain the coolant (water)-are housed in the containment  
3 structure. This structure is the fourth barrier to radioactive material release. The  
4 containment structure is a hermetically (air tight) sealed, very thick structure made  
5 of steel and concrete. This structure is designed, built and tested for one single  
6 purpose: To contain, indefinitely, a complete core meltdown. To aid in this  
7 purpose, a large, thick concrete structure is poured around the containment  
8 structure and is referred to as the secondary containment. Both the main  
9 containment structure and the secondary containment structure are housed in the  
10 reactor building. The reactor building is an outer shell that is supposed to keep the  
11 weather out, but nothing in. (this is the part that was damaged in the explosions).

12 190. **Fundamentals of nuclear reactions:** The uranium fuel generates heat  
13 by neutron-induced nuclear fission. Uranium atoms are split into lighter atoms (aka  
14 fission products). This fission process generates heat and more neutrons (one of the  
15 particles that forms an atom). When one of these neutrons hits another uranium  
16 atom, that atom can split, generating more neutrons and so on. That is called the  
17 nuclear chain reaction. During normal, full-power operation, the neutron  
18 population in a core is stable (remains the same) and the reactor is in a critical  
19 state. There is a multitude of fission products that are produced in a reactor,  
20 including cesium and iodine. Others decay more slowly, like some cesium, iodine,  
21 strontium, and argon.

#### 22 **FOUR (4) HYDROGEN EXPLOSION RELEASES**

23  
24  
25 191. What happened at Fukushima (as of March 11, 2011): The earthquake  
26 which hit Japan was several times more powerful than the worst earthquake the  
27 nuclear power plant was designed and built to withstand. This was a design defect.  
28

1 When the earthquake hit, the nuclear reactors all automatically shut down. Within  
2 seconds after the earthquake started, the control rods had been inserted into the  
3 core and the nuclear chain reaction stopped. At this point, the cooling system was  
4 supposed to carry away the residual heat, about 7% of the full power heat load  
5 under normal operating conditions. The earthquake destroyed the external power  
6 supply of the nuclear reactor, and is referred to as a “loss of offsite power.” For the  
7 first hour, the first set of multiple emergency diesel power generators started and  
8 provided the electricity that was needed. However, when the tsunami arrived, it  
9 flooded the diesel generators, causing them to fail. One of the fundamental tenets  
10 of nuclear power plant design is “Defense in Depth.” This approach leads  
11 engineers to design a plant that can withstand severe catastrophes, even when  
12 several systems fail. DEFENDANTS, and each of them, failed to design a Defense  
13 in Depth system, resulting in a core meltdown. Since the cooling cannot be  
14 restored, the core eventually melts. Since hydrogen gas is extremely combustible,  
15 when enough hydrogen gas is mixed with air, it reacts with oxygen. If there is  
16 enough hydrogen gas, it will react rapidly, producing an explosion. At some point  
17 during the venting process enough hydrogen gas built up inside the containment  
18 (there is no air in the containment), so when it was vented to the air, an explosion  
19 occurred in four of the six (6) reactors-Reactors 1-4. These hydrogen explosions  
20 destroyed the top and some of the sides of the reactor buildings.

22 192. ON AND BEFORE MARCH 11, 2011, before the PLAINTIFFS  
23 arrived off the coast of Fukushima prefecture, TEPCO was negligent because  
24 TEPCO's spokesman, Masayuki Ono, admitted that “up to 300 tons of highly  
25 contaminated water from the FNPP site were seeping into the sea and had been  
26 leaking radioactive matter since the plant suffered a triple meltdown on 11 March  
27 2011.” One PLAINTIFF declared: “**ship was still taking in sea water - but**  
28

1 **obviously the ship can't filter out the radiation. Water we all showered with,**  
2 **drank, brushed our teeth, and had our food cooked with..."**

3 193. ON AND BEFORE MARCH 11, 2011, before the PLAINTIFFS  
4 arrived off the coast of Fukushima prefecture, TEPCO was negligent because  
5 Minister Yoshihiko Noda is admitting that TEPCO created a man-made disaster,  
6 admitting liability and fault: "TEPCO must compensate those affected with  
7 sincerity and generosity as well as carry out a thorough reorganization," and he  
8 wants TEPCO to "speedily" pay compensation to victims of the Fukushima nuclear  
9 disaster."<sup>63</sup>

10 194. On March 14, 2011, the Navy published: "The U.S. 7th Fleet has  
11 temporarily repositioned its ships and aircraft away from the Fukushima Dai-Ichi  
12 Nuclear Power Plant after detecting contamination in the air and on its aircraft  
13 operating in the area. The source of this airborne radioactivity is a radioactive  
14 plume released from the Fukushima Dai-Ichi Nuclear Power Plant. Using sensitive  
15 instruments, precautionary measurements of three helicopter air crews returning to  
16 USS Ronald Reagan after conducting disaster relief missions near Sendai  
17 identified [measureable] levels of radioactivity on 17 air crew members."<sup>64</sup>

18  
19  
20 **FIRST CAUSE OF ACTION**  
**(Negligence)**

21 **Against DEFENDANT TEPCO and GE DEFENDANTS**

22 195. PLAINTIFFS hereby incorporate the allegations contained in the  
23 preceding paragraphs as though fully set forth herein.

24 196. California Code of Civil Procedure, Section 1714 provides, in  
25 pertinent part, the following: "Everyone is responsible, not only for the result of his  
26

27 <sup>63</sup> <http://www.nuc.berkeley.edu/node/5833>

28 <sup>64</sup> [http://www.navy.mil/submit/display.asp?story\\_id=59065](http://www.navy.mil/submit/display.asp?story_id=59065)

1 or her willful acts, but also for an injury occasioned to another by his or her want  
2 of ordinary care or skill in the management of his or her property or person, except  
3 so far as the latter has, willfully or by want of ordinary care, brought the injury  
4 upon himself or herself.”

5 197. At all times herein mentioned, DEFENDANT TEPCO and  
6 DEFENDANTS TEPCO’s servants, agents and/or employees owed PLAINTIFFS  
7 the same duty of care it owed to those in the vicinity of FNPP by reasonably and  
8 safely operating FNPP. DEFENDANTS GE, EBASCO, TOSHIBA and HITACHI  
9 and their servants, agents and/or employees, owed PLAINTIFFS the same duty of  
10 care they owed to those in the vicinity of FNPP to reasonably and safely design,  
11 maintain, manage and control the BWR at FNPP in a safe and suitable condition,  
12 and in good repair. The facts above make abundantly clear that DEFENDANT  
13 TEPCO’S acts and omissions and the acts and omissions of DEFENDANTS GE,  
14 EBASCO, TOSHIBA and HITACHI, and their servants, agents and/or employees,  
15 clearly breached the duties owed to people in the vicinity of FNPP and breached  
16 the duties owed to PLAINTIFFS. The breach of the duties owed by DEFENDANT  
17 TEPCO and by DEFENDANTS GE, EBASCO, TOSHIBA and HITACHI directly  
18 resulted in FNPP’s radioactive releases, causing the PLAINTIFFS, along with the  
19 general public in Fukushima and surrounding areas, to incur severe, life-  
20 threatening harm.  
21

22 198. DEFENDANT TEPCO negligently maintained, managed, and  
23 controlled FNPP, and these negligent actions and omissions caused direct and  
24 proximate harm to PLAINTIFFS. DEFENDANTS GE, EBASCO, TOSHIBA and  
25 HITACHI negligently designed, maintained, managed, and controlled FNPP and  
26 these negligent actions and omissions caused direct and proximate harm to  
27 PLAINTIFFS.  
28

1 199. Prior to March 12, 2011, TEPCO knew that the U.S. Navy rescue  
2 mission personnel were in danger of being irradiated by spreading radiation from  
3 Unit 1 at the six-reactor Fukushima-Daiichi nuclear complex. At least three other  
4 Units were in danger of failing, including the spent fuel pool of reactor Unit 4,  
5 holding 1,535 bundles of irradiated fuel.

6 200. On March 11, 2011, before the USS Ronald Reagan and Carrier Strike  
7 Group 7 arrived two miles off the coast, Fukushima Unit 1 blew up. Then Unit 3  
8 exploded, releasing plums of hydrogen gases migrating through a shared vent,  
9 which destroyed the containment building at Unit 4, exposing the spent fuel pool to  
10 the air. Unit 2 followed suit. TEPCO announced that most of the fuel rods in Units  
11 1, 2, and 3 were intact. They were not intact. This was a false, misleading,  
12 consciously negligent act and omission. The true facts were that the fuels in Units  
13 1, 2, and 3 had fused into a molten mass and were oozing through the bottom of  
14 their destroyed reactors. PLAINTIFFS suffered harms, damage and suffered, and  
15 continue to suffer, life-threatening injuries as a result of TEPCO's negligence, and  
16 the negligence of all DEFENDANTS.  
17

18 201. At all relevant times, DEFENDANT TEPCO was aware that the U.S.  
19 Navy and its personnel would provide rescue and humanitarian relief operations,  
20 including performance of their efforts to provide humanitarian assistance during its  
21 relief mission to ferry food, blankets and water to the inhabitants of the ravaged  
22 city of Sendai, located within the prefecture of Fukushima, Japan, following the  
23 earthquake and tsunami on March 11, 2011.

24 202. At all relevant times herein mentioned, the radiation produced at the  
25 FNPP does not occur naturally. Rather, the radiation releases were admittedly  
26 TEPCO'S and each of the GE DEFENDANTS' negligent "man-made disaster."  
27  
28



1 203. The radiation, which was produced as a result of nuclear fission, was  
2 utilized to boil water in order to produce steam-generated power.

3 204. At all relevant times all of the DEFENDANTS were aware that  
4 exposure to even a low dose of radiation creates grave danger to people's health.  
5 DEFENDANT TEPCO was also aware of the importance of accurately reporting  
6 actual radiation release levels.<sup>65</sup>

7 205. As a direct and proximate consequence of the negligence of all the  
8 DEFENDANTS, the reactors were damaged, and power to the cooling mechanism  
9 of the FNPP was interrupted, resulting in a meltdown of the fuel and reactors  
10 themselves, thereby triggering the release of high levels of ionizing radiation,  
11 including radioactive cesium.<sup>66</sup>

12 206. Nuclear radiation is a known human carcinogen that is linked to many  
13 human health problems. The U.S. Environmental Agency ("EPA") classifies it as a  
14 human carcinogen.<sup>67</sup>

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16 <sup>65</sup> Numerous studies indicate that even low dose radiation poses a severe danger to  
17 health; see eg., "No Safe Dose - Japan's Low -Dose Radiation Disaster,"  
18 <http://rense.com/general95/no-safe-dose.htm>; "Even Low-level radioactivity is  
19 damaging. Broad analysis of many radiation studies finds no exposure threshold  
20 that precludes harm to life,"

21 <http://www.sc.edu/news/newsarticle.php?nid=5214#.UKIjmkvma6X>; Meta-  
22 Review of 46 Studies: Even the Lowest-Level Radiation is Damaging to Human  
23 Health,

24 [http://www.washingtonsblog.com/2012/11/meta-review-of-42-studies-even-the-  
25 lowest-level-radiation-is-damaging-to-human-health.html](http://www.washingtonsblog.com/2012/11/meta-review-of-42-studies-even-the-lowest-level-radiation-is-damaging-to-human-health.html)

26 <sup>66</sup> At Fukushima, large releases of radioactivity apparently came from the concrete  
27 pools, where spent fuel rods, clad with a special alloy, were placed to cool down  
28 after their use in the reactors. These spent fuel rods were extremely hot – up to  
2,000 degrees Fahrenheit – and needed a constant circulation of cold water to keep  
them from burning up.

<sup>67</sup> According to experts, "[t]here is a near universal acceptance that  
epidemiological data demonstrates an excess risk of delayed cancer incidence  
above a dose of 0.1 sieverts. All who met with Fukushima's radioactive fallout are

1 207. When radiation from a reactor is spilled or leaks, it contaminates the  
2 environment and poses a serious health threat to humans and other species. The  
3 greater the concentration of radiation that escapes from the reactor or fuel rods, the  
4 higher the risk to humans, creating an enhanced threat to human health.

5 208. Radiation does not readily break down and does not biodegrade in the  
6 ground or water or apparatus exposed to it. Research shows that it will persist in  
7 the environment for decades, since it has a half-life in excess of 77 years, far  
8 longer than the life expectancy of humans exposed to it.

9 209. The FNPP was constructed at Fukushima more than 40 years ago.  
10 According to a local labor commission, low-skilled workers, illegally recruited in  
11 Japan's poorest areas, were used in building the nuclear power plant in the 1960s.  
12 The poor quality of construction, as well as structural defects, negligent  
13 maintenance and personnel negligence eventually triggered the disastrous  
14 consequences on March 11, 2011.  
15  
16  
17

18 probably to have some problem with the thyroid.” See [http://enenews.com/watch-  
19 all-people-met-fukushimas-radioactive-fallout-problem-thyroid-many-tokyo-  
20 already-developing-problems-video](http://enenews.com/watch-all-people-met-fukushimas-radioactive-fallout-problem-thyroid-many-tokyo-already-developing-problems-video);

21 Nuclear expert Claudia French, who was professor emeritus of molecular  
22 and cell biology at UC Berkeley, who worked on the “Manhattan Project” on  
23 uranium effects, and established the Biomedical Research Division of the  
24 Lawrence Livermore National Laboratory, wrote in his 1990 book that “by any  
25 reasonable standard of biomedical proof” there is no threshold level (no harmless  
26 dose) of ionizing radiation with respect to radiation mutagenesis and  
27 carcinogenesis – a conclusion supported in 1995 by a government-funded radiation  
28 committee.

“The results of surveys and biological monitoring of children and adults of  
Chernobyl point unambiguously to a steady, rapid and dramatic deterioration of  
health of all victims of the impact of the Chernobyl accident,” wrote Drs. E.B.

1       210.       During their lifetimes before March 12, 2011, the PLAINTIFFS, and  
2 each of them, had never been exposed to harmful levels of radiation, including the  
3 time they served aboard the U.S.S. Ronald Reagan (CVN-76), aboard other vessels  
4 within the strike force, on land or air or sea, or at any other times or places.

5       211.       As a direct and proximate result of the wrongful acts and negligence  
6 of DEFENDANTS, and each of them, as described above, PLAINTIFFS suffered  
7 damages as alleged herein.

8       212.       DEFENDANTS, and each of them, controlled all of the activities at  
9 the FNPP, and therefore are responsible for the enhanced threat of radiation  
10 exposure and for causing the damages alleged in this Complaint.

11       213.       The intentional and tortious conduct of the DEFENDANT TEPCO  
12 was aimed at and encompassed the entire area surrounding the FNPP, including the  
13 waters, land and air adjacent to the Fukushima FNPP, where the PLAINTIFFS  
14 were employed and operating.

15       214.       DEFENDANT TEPCO knew, or in the exercise of due care should  
16 have known, that the PLAINTIFFS, among several thousand other crewmen  
17 aboard the U.S.S. Ronald Reagan (CVN-76), as well as others, would be directly  
18 and harmfully impacted by DEFENDANT TEPCO's conduct. In the aftermath of a  
19 natural disaster, it is foreseeable that foreign military and aid-workers would be  
20 among those in the vicinity.

21       215.       This is further substantiated by the Japanese Independent  
22 Commission's determination that TEPCO negligently created a "man-made  
23 disaster" by failing to adequately prepare and respond to a nuclear accident. Such  
24 conduct included a failure to inspect and repair vital components of the coolant  
25 system, and failing to have emergency backup power sources to measure and  
26 monitor temperatures inside the reactors. The Independent Commission concluded  
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1 that “the direct causes of the accident were all foreseeable prior to March 11,  
2 2011.”

3 216. Upon information and belief, based upon currently available data,  
4 through their conduct, DEFENDANTS, and each of them, rendered the  
5 PLAINTIFFS infirm and poisoned their bodies.

6 217. The PLAINTIFFS must now endure a lifetime of radiation poisoning  
7 and suffering which could have and should have been avoided. PLAINTIFFS must  
8 now fear, as any reasonable person who has been irradiated would, for their future  
9 health and the health of their children, born and unborn.

10 218. Upon information and belief, DEFENDANT TEPCO failed to timely  
11 and adequately test the water to which the PLAINTIFFS were exposed in order to  
12 detect contamination.

13 219. Upon information and belief, DEFENDANT TEPCO, its agents,  
14 servants and/or employees failed to perform proper and adequate testing within the  
15 theater of their operation of the radiation levels to which the PLAINTIFFS and/or  
16 their vessels would be exposed, to the PLAINTIFFS’ detriment.

17 220. Upon information and belief, each and all DEFENDANTS  
18 constructed and operated the FNPP with the knowledge that the nuclear fuel had a  
19 potential to leak, or in reckless disregard of the knowledge as to whether or not the  
20 FNPP could leak radiation into the environment.

21 221. DEFENDANT TEPCO breached its duty of reasonable care in  
22 operating its facilities, and by creating a “man-made” disaster, causing radioactive  
23 contamination of PLAINTIFFS’ bodies, resulting in life threatening consequences  
24 to their physical and emotional well-being.  
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1 222. All DEFENDANTS also knew, or should have known, that the system  
2 they were using for storing spent fuel rods and for the containment of radiation and  
3 utilization of nuclear material at the FNPP was faulty, inadequate and leaking.

4 223. DEFENDANT TEPCO and the GE DEFENDANTS also knew or  
5 should have known that the radiation released at the FNPP is remarkably  
6 recalcitrant to natural degradation and, once dispersed into the environment, it is  
7 extremely difficult to clean up.

8 224. According to data existing at that time, and uniquely known to  
9 DEFENDANT TEPCO at the time, the PLAINTIFFS' consequent exposure to  
10 radiation within their zone of operation indicated that radiation levels had already  
11 reached levels exceeding the levels of exposure which the people living the same  
12 distance from Chernobyl experienced, and who subsequently developed cancer.<sup>68</sup>

13 225. Consequently, the potential for the development of cancer in the  
14 PLAINTIFFS has also been dangerously heightened, due to the levels of exposure  
15 experienced by them during "Operation Tomodachi."

16 226. DEFENDANTS' negligence proximately caused widespread  
17 contamination of PLAINTIFFS' environs, including their air and water supply.

18 227. PLAINTIFFS have suffered and been damaged, all as described above  
19 and herein, as a direct and proximate result of DEFENDANTS' negligence.  
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21  
22 <sup>68</sup> The nuclear community has now created a special rating system for Fukushima –  
23 assigning it to a new category, above Chernobyl, as a no. 8 level nuclear disaster.  
24 Fukushima is a "[m]ulti-source major nuclear accident requiring international  
25 assistance and monitoring. See Nuclear incident scales:  
26 <http://www.coasttocoastam.com/pages/portzline-images>;  
27 Measured as quadrillions or petabecquerels (10 to the 15<sup>th</sup> Power) See, Becquerel:  
28 <http://www.wikipedia.org/wiki/Becquerel> , the radiation was comparable to  
Chernobyl, being well over half, if not equivalent in volume. See, Chernobyl:  
Assessment of Radiological and Health Impact 2002 Update of Chernobyl: Ten  
Years On, <http://www.oecd-nea.org/rp/chernoble/c02.html>

1 228. Upon information and belief, as a further direct and proximate result  
2 of DEFENDANTS' negligence, PLAINTIFFS have been and will be required to  
3 undergo further medical testing, evaluation and medical procedures, including but  
4 not limited to chelation therapy, bone marrow transplants and/or genetic re-  
5 programming for leukemia, in an effort to seek cure, and will be required to  
6 employ extraordinary means to achieve cure.

7 229. As a further direct and proximate result of DEFENDANTS'  
8 negligence, the PLAINTIFFS incurred losses and damages for personal injury and  
9 property damage, loss of use and enjoyment of life and their property, the need for  
10 periodic medical examination and treatment, and economic losses, including wage  
11 loss, and the expenditure of time and money, and will continue to incur losses and  
12 damages in the future.

13 230. PLAINTIFFS also face additional and irreparable harm to their life  
14 expectancy, which has been shortened and cannot be restored to its prior condition.

15 231. Solely as a result of the DEFENDANTS' negligence, carelessness and  
16 recklessness, the PLAINTIFFS suffered severe and serious personal injuries to  
17 mind and body, and further, the PLAINTIFFS were subjected to great physical  
18 pain and mental anguish.

19 232. By reason of the foregoing, the PLAINTIFFS were severely injured  
20 and damaged, sustained severe nervous shock and mental anguish, great physical  
21 pain and emotional upset, some of which injuries are believed to be permanent in  
22 nature and duration, and the PLAINTIFFS will permanently suffer pain,  
23 inconvenience and other effects of such injuries; the PLAINTIFFS incurred and in  
24 the future will necessarily incur further hospital and/or medical expenses in an  
25 effort to be cured of said injuries; and the PLAINTIFFS will be unable to pursue  
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1 their usual duties with the same degree of efficiency as prior to this incident, all to  
2 the PLAINTIFFS' great damage.

3 233. The DEFENDANTS' conduct was willful, wanton, reckless,  
4 malicious and/or exhibited a gross indifference to, and a callous disregard for  
5 human life, safety and the rights of others, and more particularly, the rights, life  
6 and safety of the PLAINTIFFS; and was motivated by consideration of profit,  
7 financial advantage, monetary gain, economic aggrandizement and/or cost  
8 avoidance, to the virtual exclusion of all other considerations.

9 234. Due to DEFENDANTS' negligence, each of the PLAINTIFFS is  
10 entitled to compensatory damages in a sum to be determined by the jury.

11 Wherefore, PLAINTIFFS request relief as hereinafter provided.

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13 **SECOND CAUSE OF ACTION**  
14 **(Strict Liability--Manufacturing Defect)**  
15 **Against DEFENDANTS GE, EBASCO, TOSHIBA, and HITACHI**  
16 **(“GE DEFENDANTS”)**

17 235. PLAINTIFFS hereby incorporate the allegations contained in the  
18 preceding paragraphs as though fully set forth herein.

19 236. DEFENDANTS GE, EBASCO, TOSHIBA, and HITACHI  
20 manufactured, distributed, and sold the subject defective Mark 1 Boiling Water  
21 Reactors (“BWR”), an unreasonably dangerous product.

22 237. The Boiling Water Reactors, which malfunctioned, melted down,  
23 exploded, and released copious quantities of radiation at the Fukushima Daiichi  
24 Power Plant on March 11, 2011, contained manufacturing defects when each of the  
25 subject reactors left the possession of GE, EBASCO, TOSHIBA, and HITACHI.

26 238. As manufacturers, designers, distributors, suppliers, sellers and  
27 marketers, DEFENDANTS GE, EBASCO, TOSHIBA, and HITACHI breached  
28 this duty by manufacturing, distributing, selling and marketing the Boiling Water

1 Reactors with the actual and constructive knowledge that the product posed a high  
2 degree of risk to the safety and well-being of all persons within the vicinity of the  
3 FNPP, including PLAINTIFFS.

4 239. The GE DEFENDANTS had actual and constructive knowledge of  
5 the properties of radiation that would ensure that, once released into the  
6 environment, radiation would spread further and in concentrations that would  
7 cause injury to all persons within the vicinity of the FNPP, including  
8 PLAINTIFFS.

9 240. The GE DEFENDANTS' conduct was unreasonable in the  
10 circumstances. As set forth above, available scientific data, of which the GE  
11 DEFENDANTS had actual and constructive knowledge, gives rise to the  
12 reasonable inference that the manufacturing defects created foreseeable dangers to  
13 all persons within the vicinity of the FNPP, including PLAINTIFFS.  
14

15 241. The Boiling Water Reactor's manufacturing defects were substantial  
16 factors in causing PLAINTIFFS' injuries, damages, and harm. The Boiling Water  
17 Reactor's manufacturing defects proximately caused reasonably foreseeable  
18 damages to the PLAINTIFFS.

19 242. At all times herein mentioned, DEFENDANTS GE, EBASCO,  
20 TOSHIBA, and HITACHI acted with malice, fraud and oppression, and engaged in  
21 despicable conduct that should not be tolerated in a civilized society, displaying a  
22 conscious, willful and intentional disregard for the health, safety and welfare of the  
23 public, the environment and the PLAINTIFFS. As a result of DEFENDANTS GE,  
24 EBASCO, TOSHIBA, and HITACHI'S conduct, PLAINTIFFS are entitled to  
25 punitive damages as a means of protecting the public by deterring such wanton,  
26 callous and intentionally injurious conduct.

27 Wherefore, PLAINTIFFS request relief as hereinafter provided.  
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**THIRD CAUSE OF ACTION**  
**(Strict Liability for Design Defect)**  
**Against DEFENDANTS GE, EBASCO, TOSHIBA, and HITACHI**  
**(“GE DEFENDANTS”)**

243. PLAINTIFFS hereby incorporate the allegations contained in the preceding paragraphs as though fully set forth herein.

244. The GE DEFENDANTS, during the relevant time period, were the designers, manufacturers, distributors, sellers, and creators of the BWRs.

245. The GE DEFENDANTS had a duty of due care to design and manufacture reasonably safe Nuclear Power BWRs.

246. The GE DEFENDANTS had a duty of care to test the Nuclear Power BWRs to determine the risks posed to all persons within the vicinity of the FNPP, including the PLAINTIFFS, the environment, water, and the air in the surrounding vicinity. The BWRs did not perform as safely as an ordinary consumer would have expected it to perform when used or misused in an intended or reasonably foreseeable way.

247. The GE DEFENDANTS had a duty not to put on the market an unsafe and defectively designed product that posed a serious danger to all persons within the vicinity of the FNPP, including the PLAINTIFFS.

248. The GE DEFENDANTS breached said duties of due care when they manufactured a defectively designed product, namely the BWRs, with actual or constructive knowledge of the defects.<sup>69</sup> Due to the design and manufacturing

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<sup>69</sup> There exists an accumulation of evidence that the earthquake itself was the primary cause of the meltdowns, something [TEPCO] does not want to admit—that there are other inherent flaws in the way the power plant was built and operated. See Report on Nuclear Disaster Holds Key to Reactor’s Fate,

<http://online.wsj.com/article/SB1000142405270230444140577482113658775518.html>

1 defects, the FNPP was not reasonably safe and protective of the environment  
2 generally and of PLAINTIFFS', among others, health and well-being.<sup>70</sup>

3 249. The defective design of the GE DEFENDANTS' BWRs, as alleged  
4 herein, actually and proximately caused reasonably foreseeable damages to the  
5 PLAINTIFFS. The BWRs' failure to perform safely was a substantial factor in  
6 causing PLAINTIFFS harm.

7 250. The GE DEFENDANTS' conduct in the design, manufacture, and  
8 maintenance of the BWRs, a defective or unreasonably dangerous product, makes  
9 each of GE DEFENDANTS strictly liable to the PLAINTIFFS.

10 Wherefore, PLAINTIFFS request relief as hereinafter provided.  
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14 Nuclear expert Gundersen points out that the service pumps failed because they  
15 were positioned in such a way that they were flooded by the tidal wave on 311.  
16 These pumps send water from the ocean to cool the back-up diesel generators.  
17 "There could have been 14 meltdowns and not three. If you look at the data, there  
18 were six units at Fukushima Daiichi (Power Station No. 1), there are four at  
19 Fukushima Daini (Station No. 2), three at Onagawa and one at Tokai. The net  
20 affect is that there were 37 diesel generators between those plants. 24 of those  
21 diesels were knocked out by the tsunami. You need the diesels to cool the plant."  
22 At FNPP no. 1 the tsunami flooded the actual diesel generators, but at the other  
23 plants, the "tsunami knocked out the cooling water to the diesels, something called  
24 service water. So, Japan narrowly missed 14 meltdowns and not three because the  
25 cooling water to 24 of 37 diesels was destroyed." See Gundersen, July 6, 2012,  
26 Pacifica Radio Host Ian Masters and Fairewinds' Arnie Gundersen: Lessons Not  
27 Learned From Fukushima Daiichi, <http://www.fairewinds.com/radio>; SolarIMG  
28 Podcast with Arnie Gundersen–Aug 10/2012, <http://solarimg.org/?p=3021>  
<sup>70</sup> **Error! Main Document Only.** The FNPP site is fraught with danger, with  
constant reports of highly toxic water leaking from this pipe or that, or this reactor  
or that. For example, water in Unit 2 turbine basement was found to have 47  
million becquerels per liter. Unit 2 Water 10 Times More Radioactive than Unit 1,  
[http://enenews.com/unit-2-10-times-more-radioactive-than-unit-1-47000000-  
Becquerels-per-liter-in-turbine-room-basement](http://enenews.com/unit-2-10-times-more-radioactive-than-unit-1-47000000-Becquerels-per-liter-in-turbine-room-basement)

**FOURTH CAUSE OF ACTION**  
**(Strict Liability for Ultrahazardous Activities)**  
**Against DEFENDANT TEPCO and GE DEFENDANTS**

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3 251. PLAINTIFFS hereby incorporate the allegations contained in the  
4 preceding paragraphs as though fully set forth herein.

5 252. DEFENDANT TEPCO and the GE DEFENDANTS, and each of  
6 them, engaged in an ultra-hazardous activity that caused harm, damages, losses,  
7 injuries, including fear of contracting cancer, birth defects for their children, born  
8 and unborn, and economic and non-economic damages.

9 253. DEFENDANT TEPCO and the GE DEFENDANTS, and each of  
10 them, are responsible for that harm, injuries, damages, both economic and non-  
11 economic because DEFENDANTS engaged in producing nuclear power, an ultra-  
12 hazardous activity, at FNPP.

13 254. PLAINTIFFS' injuries, damages, losses and harm are the kind of  
14 harm that would be anticipated as a result of the risk created by exposure to a  
15 radiation release as the nature and kind that was released at Fukushima.  
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17 255. DEFENDANT TEPCO and the GE DEFENDANTS' acts proximately  
18 caused harm and damage to the PLAINTIFFS, including personal injury, property  
19 damage, loss of enjoyment of their property and life, the need for periodic  
20 examination and treatment, as well as economic losses including loss of earnings,  
21 stigma damages, the cost of obtaining potential cure, and other needless  
22 expenditures of time and money. PLAINTIFFS will continue to incur losses and  
23 damage in the future. Based on PLAINTIFFS' repeated exposure to ionizing  
24 radiation, PLAINTIFFS have a reasonable fear that said exposure more likely than  
25 not increases their risk of developing cancer in the future.  
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1 256. DEFENDANT TEPCO and the GE DEFENDANTS, and each of  
2 them, intended to cause or acted with conscious disregard of the probability of  
3 causing injury to PLAINTIFFS, and therefore, are liable for punitive damages.

4 Wherefore, PLAINTIFFS request relief as hereinafter provided.

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6 **FIFTH CAUSE OF ACTION**  
7 **(Negligence per se: Res Ipsa Loquitur)**  
8 **Against DEFENDANT TEPCO and GE DEFENDANTS**

9 257. PLAINTIFFS hereby incorporate the allegations contained in the  
10 preceding paragraphs as though fully set forth herein.

11 258. PLAINTIFFS' harm was caused by a release of radiation from the  
12 FNPP, which only DEFENDANT TEPCO and the GE DEFENDANTS controlled.

13 259. PLAINTIFFS' voluntary actions did not cause or contribute to the  
14 events which harmed them.

15 260. PLAINTIFFS' harm, injuries, damages and losses ordinarily would  
16 not have happened unless someone was negligent.

17 261. PLAINTIFFS' injuries, damages, losses and harm are the kind of  
18 harm that would be anticipated as a result of the risk created by exposure to a  
19 radiation release of the nature and kind that was released at Fukushima.

20 262. DEFENDANT TEPCO and the GE DEFENDANTS' acts actually and  
21 proximately caused harm and damage to the PLAINTIFFS, including personal  
22 injury, property damage, loss of enjoyment of their property and life, the need for  
23 periodic examination and treatment, as well as economic losses including loss of  
24 earnings, stigma damages, the cost of obtaining potential cure, and other needless  
25 expenditures of time and money. PLAINTIFFS will continue to incur losses and  
26 damage in the future. Based on PLAINTIFF'S repeated exposure to ionizing  
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1 radiation, PLAINTIFFS have a reasonable fear that said exposure more likely than  
2 not increased their risk of developing cancer in the future.

3 Wherefore, PLAINTIFFS request relief as hereinafter provided.  
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5 **SIXTH CAUSE OF ACTION**  
6 **(Presumption of Negligence Per Se)**  
7 **Against DEFENDANT TEPCO and GE DEFENDANTS**

8 263. PLAINTIFFS hereby incorporate the allegations contained in the  
9 preceding paragraphs as though fully set forth herein.

10 264. DEFENDANT TEPCO and each GE DEFENDANTS' illegal,  
11 intentional, reckless and negligent conduct as herein above alleged, violated  
12 several State, Federal, and International laws, regulations, and statutes, which were  
13 enacted to protect the public, the communities and the environment, including the  
14 class of individuals to which PLAINTIFFS belong: Good Samaritans, rescue  
15 workers, indeed, the "TOMODACHIS" (friends), who offered help to the victims  
16 of the Fukushima earthquake and tsunami. The 1972 Convention on the Prevention  
17 of Marine Pollution by Dumping of Wastes and Other Matter, to which Japan is a  
18 signatory, bans the dumping of pollution at sea.

19 265. The Inter-Governmental Conference on the Convention on the  
20 dumping of Wastes at Sea, which met in London in November 1972 at the  
21 invitation of the United Kingdom, adopted this instrument, generally known as the  
22 London Convention. The London Convention, one of the first international  
23 conventions for the protection of the marine environment from human activities,  
24 came into force on August 30, 1975.

25 266. The London Convention contributes to the international control and  
26 prevention of marine pollution by prohibiting the dumping of certain hazardous  
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1 materials. In addition, a special permit is required prior to dumping of a number of  
2 other identified materials and a general permit for other wastes or matter.

3 267. "Dumping" has been defined as the deliberate disposal at sea of  
4 wastes or other matter from vessels, aircraft, platforms or other man-made  
5 structures, as well as the deliberate disposal of these vessels or platforms  
6 themselves. Annexes list wastes which cannot be dumped and others for which a  
7 special dumping permit is required.

8 268. Amendments adopted in 1993 (which entered into force in 1994)  
9 banned the dumping into sea of low-level radioactive wastes. In addition, the  
10 amendments phased out the dumping of industrial wastes by 31 December, 1995  
11 and banned the incineration at sea of industrial wastes.

12 269. DEFENDANT TEPCO engaged in intentionally dumping in excess of  
13 11,500 tons of radioactive water into the Pacific Ocean during and following the  
14 meltdown of the FNPP.

15 270. PLAINTIFFS' injuries, damages, losses and harm are the kind of  
16 harm that would be anticipated as a result of the risk created by exposure to a  
17 radiation release of the nature and kind that was released at Fukushima.  
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19 271. DEFENDANTS' acts proximately caused harm and damage to the  
20 PLAINTIFFS, including personal injury, property damage, loss of enjoyment of  
21 their property and life, the need for periodic examination and treatment, as well as  
22 economic losses including loss of earnings, stigma damages, the cost of obtaining  
23 potential cure, and other needless expenditures of time and money. PLAINTIFFS  
24 will continue to incur losses and damage in the future. Based on PLAINTIFFS'  
25 repeated exposure to ionizing radiation, PLAINTIFFS have a reasonable fear that  
26 said exposure more likely than not has increased their risk of developing cancer in  
27 the future.  
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1 Wherefore, PLAINTIFFS request relief as hereinafter provided.

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3 **SEVENTH CAUSE OF ACTION**  
4 **(Survival Action--Wrongful Death)**

5 **By Manuel Leslie as Administrator of the Estate of Theodore A. H.**  
6 **Against DEFENDANT TEPCO and GE DEFENDANTS**

7 272. PLAINTIFFS hereby incorporate the allegations contained in the  
8 preceding paragraphs as though fully set forth herein.

9 273. Plaintiff the Estate of Theodore A. H., By Manuel Leslie as  
10 Administrator, brings this "Survival Action", pursuant California Code of Civil  
11 Procedure Section 377.30, providing: "A cause of action that survives the death of  
12 the person entitled to commence an action or proceeding passes to the decedent's  
13 successor in interest, and an action may be commenced by the decedent's personal  
14 representative or, if none, by the decedent's successor in interest.

15 274. DEFENDANTS' negligent and intentional conduct cause Theodore A.  
16 H. A. to be exposed to excessive radiation during Operation Tomodachi, causing  
17 his injuries, illness, damages and harm, and his death.

18 275. On December 23, 2012, Manuel Leslie took Theodore A. H. to the  
19 Emergency room in Reno, Nevada because he could not breathe and had sharp  
20 pains in his right Chest. X-Rays were taken, revealing a collapsed right lung filled  
21 with fluid. Several weeks later Theodore A. H. was notified that he had a large  
22 mass in his chest. A subsequent biopsy was taken, identifying he had Synovial  
23 Sarcoma, an exceedingly rare cancer. He was notified of this condition on his  
24 birthday on January 11, 2013. Research reveals that this cancer only occurs in .001  
25 % of the population under 60 years of age.

26 276. During "Operation Tomodachi," Theodore A. H. notified the ship's  
27 corpsman that he was having breathing problems. Theodore A. H. was  
28 subsequently discharged and he began having serious breathing problems, pain in

1 his right shoulder and excessive high heart rate. Leslie accompanied him on his  
2 visits to the VA clinic in December 2012 and January 2013 where he was  
3 diagnosed with Synovial Sarcoma in his chest. He was treated with two rounds of  
4 chemo therapy Theodore A. H. was diagnosed with cancer just before New Years  
5 in 2012. He died on April 24, 2014 in a VA hospice in Reno, Nevada. He had  
6 Synovial Sarcoma, an inoperable tumor next to his heart. Due to the position of the  
7 tumor, it caused lung and heart issues preventing the removal of the tumor,  
8 according to his doctors.

9 277. DEFENDANTS' negligent and intentional conduct are the actual and  
10 proximate cause of the decedent's damages, injuries, losses and harms, including  
11 the following: ALL loss or damage that the decedent sustained or incurred before  
12 death, including any penalties or punitive or exemplary damages that the decedent  
13 would have been entitled to recover had the decedent lived, and including medical  
14 expenses and lost wages, as well as penalties, punitive or exemplary damages.  
15

16 Wherefore, PLAINTIFFS request relief as hereinafter provided.

17 **EIGHT CAUSE OF ACTION**

18 **(Wrongful Death)**

19 **By Manuel Leslie as Administrator of the Estate of Theodore A. H.  
20 Against DEFENDANT TEPCO and GE DEFENDANTS**

21 278. PLAINTIFFS hereby incorporate the allegations contained in the  
22 preceding paragraphs as though fully set forth herein.

23 279. THE ESTATE OF THEODORE H., by Manuel Leslie, ("LESLIE") as  
24 the Administrator of the Estate of Theodore H. alleges that Theodore H. is survived  
25 by his five-year old daughter, M.H., born April 29, 2009, who currently resides  
26 with her mother, Allison D. Eyring, in Lillington, NC.

27 280. Theodore A. H., an Aviation Mechanic Structural Petty Officer 2nd  
28 Class, a member of VAQ 139 Cougars, assigned to the 7th Fleet on the USS



1 Reagan assisting in "Operation Tomodachi", beginning in February, 2011, during  
2 which he was exposed to radiation which caused him to develop synovial sarcoma  
3 behind his heart, a rare form of inoperable cancer, from which he died April 14,  
4 2014.

5 281. PLAINTIFF, the Estate of Theodore A. H., has sustained two  
6 categories of damages, economic and noneconomic. M. H., the heir to the Estate of  
7 Theodore A. H., has lost the financial support that her father, Theodore A. H.,  
8 would have contributed to her during either the life expectancy that Theodore A.  
9 H. had before his death or the life expectancy of M. H.

10 282. PLAINTIFF, the Estate of Theodore A. H., has also sustained the loss  
11 of gifts and benefits that M. H. would have expected to receive from Theodore A.  
12 H.

13 283. PLAINTIFF, the Estate of Theodore A. H., has also sustained the loss  
14 of funeral and burial expenses; and the reasonable value of household services that  
15 Theodore A. H. would have provided.

16 284. PLAINTIFF, the Estate of Theodore A. H. also claims the following  
17 noneconomic damages:

- 18 1. The loss of Theodore A. H.'s love, companionship, comfort, care,  
19 assistance, protection, affection, society, moral support;
- 20 2. The loss of Theodore A. H.'s training, guidance and the loss as a  
21 role model for adulthood.

22 Wherefore, PLAINTIFFS request relief as hereinafter provided.

23 **NINTH CAUSE OF ACTION**

24 **(Survival Action--Wrongful Death)**

25 **By Jinky M. A. as Personal Representative of the Estate of Charliemagne**

26 **T. A**

27 **Against DEFENDANT TEPCO and GE DEFENDANTS**

1 285. PLAINTIFFS hereby incorporate the allegations contained in the  
2 preceding paragraphs as though fully set forth herein.

3 286. Plaintiff the Estate of Charliemagne T. A., By Jinky M. A. as  
4 Personal Representative brings this “Survival Action”, pursuant California Code of  
5 Civil Procedure Section 377.30.

6 287. DEFENDANTS’ negligent and intentional conduct cause  
7 CHARLIEMAGNE T. A. to be exposed to excessive radiation during Operation  
8 Tomodachi, causing his injuries, illness, damages and harms, and his death. His  
9 death was caused by the loss of functioning of his immune system, and leukemia,  
10 Acute Lymphocytic Leukemia. CHARLIEMAGNE T. A. was stationed in Japan in  
11 the US Navy from July 1, 2009, through July 12, 2012. He was first diagnosed  
12 with leukemia on October 27, 2013.

13 288. DEFENDANTS’ negligent and intentional conduct are the actual and  
14 proximate cause of the decedent’s damages, injuries, losses and harms, including  
15 the following: ALL loss or damage that the decedent sustained or incurred before  
16 death, including any penalties or punitive or exemplary damages that the decedent  
17 would have been entitled to recover had the decedent lived, and including medical  
18 expenses and lost wages, as well as penalties, punitive or exemplary damages.  
19

20 Wherefore, PLAINTIFFS request relief as hereinafter provided.

21  
22 **TENTH CAUSE OF ACTION**  
23 **(Wrongful Death)**

24 **By Jinky M. A. as Personal Representative of the Estate of Charliemagne**  
25 **T. A.**

26 **Against DEFENDANT TEPCO and GE DEFENDANTS**

27 289. PLAINTIFFS hereby incorporate the allegations contained in the  
28 preceding paragraphs as though fully set forth herein.

1 290. CHARLIEMAGNE T. A was born October 4, 1987. His Place of  
2 Birth: Philippines. His Death: September 16, 2014. His Place of Death: Fresno,  
3 CA. His Occupation: AO2 in U.S. Navy for eight years and was a U. S. Sailor First  
4 Responder during Operation Tomodachi. CHARLIEMAGNE T. A was aboard the  
5 USS Essex. During operation Tomodachi, he was given and took iodine pills due  
6 to the radiation exposure. He was working on the deck of the ship in the vicinity of  
7 the radiation contaminated helicopters.

8 291. THE ESTATE OF CHARLIEMAGNE T. A. by Jinky M. A. as the  
9 Administrator of the Estate of CHARLIEMAGNE T. A. alleges that  
10 CHARLIEMAGNE T. A is survived by his wife Jinky M. A., his sons, J. A. and C.  
11 J. A. who currently reside in Fresno, California.

12 292. CHARLIEMAGNE T. A, is survived by his parents, Eliminio and  
13 Arline A.; his wife, Jinky M. A.; his sons, J. A., age 7 and C. J. A., age 6; and his  
14 brothers, Kenneth B. A., Kervin A., and Edzel A.

15 293. PLAINTIFF, the Estate of CHARLIEMAGNE T. A., has sustained  
16 two categories of damages, economic and noneconomic. His wife, Jinky and his  
17 sons, J. A. and C. J. A., the heir to the Estate of CHARLIEMAGNE T. A., has lost  
18 the financial support that their father, CHARLIEMAGNE T. A, would have  
19 contributed to them during either the life expectancy that CHARLIEMAGNE T. A.  
20 had before his death or the life expectancy of his last remaining heirs.

21 294. PLAINTIFF, the Estate of CHARLIEMAGNE T. A., has also  
22 sustained the loss of gifts and benefits that his heirs would have expected to  
23 receive from CHARLIEMAGNE T. A. PLAINTIFF, the Estate of  
24 CHARLIEMAGNE T. A has also sustained the loss of funeral and burial expenses;  
25 and the reasonable value of household services that Theodore A. H. would have  
26 provided.  
27  
28

1 295. PLAINTIFF, the Estate of CHARLIEMAGNE T. A., also claims the  
2 following noneconomic damages:

- 3 1. The loss of CHARLIEMAGNE T. A.'s love, companionship,  
4 comfort, care, assistance, protection, affection, society, moral support;  
5  
6 2. The loss of CHARLIEMAGNE T. A.'s training, guidance and the  
7 loss as a role model for adulthood; and the loss of the enjoyment of  
8 sexual relations.

9 Wherefore, PLAINTIFFS request relief as hereinafter provided.

10 **ELEVENTH CAUSE OF ACTION**

11 **(Loss of Consortium)**

12 **Against DEFENDANT TEPCO and GE DEFENDANTS**

13 108. PLAINTIFFS hereby incorporate the allegations contained in the  
14 preceding paragraphs, as though fully set forth herein.

15 109. Each spouse of each PLAINTIFF herein alleges he/she has been  
16 harmed by the injury to his/her husband/wife/domestic partners. Each  
17 spouse/domestic partner of each Plaintiff seeks to be reasonably compensated for  
18 the loss of his/her husband/wife's/domestic partner's companionship and services,  
19 past and future, including:

- 20  
21 1. The loss of love, companionship, comfort, care, assistance,  
22 protection, affection, society, moral support; and  
23  
24 2. The loss of the enjoyment of sexual relations and/or the ability to  
25 have children.

26 **CLASS ACTION AVERMENTS**

27 110. PLAINTIFFS hereby incorporate the allegations contained in the  
28 preceding paragraphs, as though fully set forth herein.

1 111. PLAINTIFFS state, Pursuant to Federal Rule of Civil Procedure,  
2 23(b) (1)(A)(B) that: (1) prosecuting separate actions by individual Class Members  
3 would create a risk of: (A) inconsistent or varying adjudications with respect to  
4 individual class members that would establish incompatible standards of conduct  
5 for the DEFENDANTS; or (B) would substantially impair or impede their ability to  
6 protect their interests.

7 112. PLAINTIFFS further state, Pursuant to Federal Rule of Civil  
8 Procedure 23(b) (2) and (3) that: (2) the DEFENDANTS opposing the class have  
9 acted or refused to act on grounds that apply generally to the class, so that final  
10 injunctive relief or corresponding declaratory relief is appropriate respecting the  
11 class as a whole; or (3) this Court should find that the questions of law or fact  
12 common to class members predominate over any questions affecting only  
13 individual members, and that a class action is superior to other available methods  
14 for fairly and efficiently adjudicating the controversy. The matters pertinent to  
15 these findings include: (A) the class members' interests in individually controlling  
16 the prosecution or defense of separate actions;(B) the extent and nature of any  
17 litigation concerning the controversy already begun by class members;(C) the  
18 desirability of concentrating the litigation of the claims in the this U.S. District  
19 Federal Court; and (D) the unlikely difficulties in managing this class action.  
20

21  
22 **PRAYER FOR RELIEF**

23 1. For a judgment ordering, requiring and compelling the DEFENDANTS to  
24 establish a fund in an amount not less than one BILLION  
25 (\$1,000,000,000.00) DOLLARS as to each DEFENDANT available to  
26 advance and pay all costs and expenses for each of the PLAINTIFFS for  
27 medical examination, medical monitoring, and treatment by physicians of  
28

1 PLAINTIFFS' choice; And for the payment of costs and expenses for each  
2 of the PLAINTIFFS for medical examination, medical monitoring, and  
3 treatment by physicians of PLAINTIFFS' choice for their offspring who are  
4 at risk for birth defects caused by genetic gene mutation.

- 5 2. For special and economic damages, including lost wages, for all Causes of  
6 Action;
- 7 3. For general and non-economic damages for all Causes of Action;
- 8 4. For punitive damages for all Causes of Action;
- 9 5. For prejudgment interest at the prevailing legal rate;
- 10 6. For costs of the suit including reasonable attorneys' fees; and
- 11 7. For such other and further relief, including injunctive relief, as the Court  
12 may deem proper.
- 13

14 **Dated: November 18, 2014**

15 **RESPECTFULLY SUBMITTED,**

16  
17  
18 By: /S/ PAUL C. GARNER  
19 PAUL C. GARNER, ESQ.  
20 Attorney for Plaintiffs

21 **Dated: November 18, 2014**

22 **RESPECTFULLY SUBMITTED,**

23 **LAW OFFICES OF BONNER & BONNER**

24  
25 By: /S/CHARLES A. BONNER  
26 CHARLES A. BONNER  
27 Attorney for Plaintiffs  
28

**DEMAND FOR JURY TRIAL**

The PLAINTIFFS hereby demand a jury trial of all issues as provided by Rule 38(a) of the Federal Rules of Civil Procedure.

**Dated: November 18, 2014**

**RESPECTFULLY SUBMITTED,**

By: /S/PAUL C. GARNER

PAUL C. GARNER, ESQ.

Attorney for Plaintiffs

**Dated: November 18, 2014**

**RESPECTFULLY SUBMITTED,**

**LAW OFFICES OF BONNER & BONNER**

By: /S/CHARLES A. BONNER

CHARLES A. BONNER

Attorney for Plaintiffs

**CERTIFICATE OF SERVICE**

1  
2 I, CHARLES A. BONNER, am an attorney at Law Offices of Bonner & Bonner  
3 counsel of record for Plaintiffs in this action. I certify that on November 18, 2014,  
4 I caused the attached document to be served via this Court's Electronic Filing  
5 System on DANIEL COLLINS, counsel for DEFENDANTS, a registered user of  
6 that system. *See* Local Civil Rule 5.4.

7 DATED: November 18, 2014

8 **BY:/S/ CHARLES A. BONNER**  
9 CHARLES A. BONNER  
10 ATTORNEY FOR PLAINTIFFS  
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